

2023 Business Plan and Budget

Final

August 10, 2022

RELIABILITY | RESILIENCE | SECURITY









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Preface

Electricity is a key component of the fabric of modern society and the Electric Reliability Organization (ERO) Enterprise serves to strengthen that fabric. The vision for the ERO Enterprise, which is comprised of the North American Electric Reliability Corporation (NERC) and the six Regional Entities, is a highly reliable and secure North American bulk power system (BPS). Our mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid.

Reliability | Resilience | Security

Because nearly 400 million citizens in North America are counting on us

The North American BPS is divided into six Regional Entity boundaries as shown in the map and corresponding table below. The multicolored area denotes overlap as some load-serving entities participate in one Region while associated Transmission Owners/Operators participate in another.



MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RF	ReliabilityFirst
SERC	SERC Reliability Corporation
Texas RE	Texas Reliability Entity
WECC	Western Electricity Coordinating Council

About NERC

Overview

The North American Electric Reliability Corporation (NERC) is a not-for-profit entity organized under the New Jersey Nonprofit Corporation Act. NERC's area of responsibility spans the continental U.S. and portions of Canada and Mexico. Entities under NERC's jurisdiction are the users, owners, and operators of the bulk power system (BPS)¹—a system that serves the needs of nearly 400 million people.

Electric Reliability Organization

The Federal Energy Regulatory Commission (FERC) certified and has oversight of NERC as the Electric Reliability Organization (ERO) within the United States to establish and enforce NERC Reliability Standards for the U.S. portion of the BPS, pursuant to Section 215 of the Federal Power Act (FPA). As of June 18, 2007, FERC granted NERC the legal authority to enforce Reliability Standards with all U.S. users, owners, and operators of the BPS and made compliance with those standards mandatory and enforceable. Section 215 also requires that the organization certified by FERC as the ERO seek recognition with relevant authorities in Canada and Mexico. In 2005, the U.S. Department of Energy (DOE) and Canadian federal and provincial governments agreed to bilateral principles for a consistent, continent-wide reliability regulatory framework under a non-governmental institution (the ERO) designed to function on an international basis. To date, NERC has memoranda of understandings (MOUs) with eight Canadian provinces² and the Canada Energy Regulator in furtherance of this framework. NERC works with the Mexican regulator, *Comísion Reguladora de Energía* (CRE), and the Mexican system and market operator, *CENACE*, under a MOU signed in 2017 to ensure consistency with the framework in Canada and the United States.

Membership and Governance

A 12-member Board of Trustees (Board), comprised of 11 independent trustees and NERC's president and chief executive officer serving as the management trustee, governs NERC. The Board has formed several committees to facilitate oversight of the organization in the areas of finance and audit, corporate governance and human resources, compliance, technology and security, nominations, and enterprisewide risk.

Membership in NERC is open to any person or entity that has an interest in the reliability of the North American BPS. Membership is voluntary and affords participants the opportunity to engage in the governance of the organization, including through election to the Member Representatives Committee (MRC).³ NERC, its members, and each applicable BPS owner, operator, and user must comply with the NERC <u>Rules of Procedure</u> (ROP).

¹ Standards, compliance, and enforcement activities focus on the <u>Bulk Electric System (BES)</u>, comprised of certain BPS facilities.

² British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia

³ The MRC comprises 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 Oversight

As the international, multijurisdictional ERO in North America, NERC:

- Proposes, supports the development of, monitors compliance with, and enforces mandatory Reliability Standards for the North American BES, subject to regulatory oversight and approvals from FERC in the United States and applicable authorities in Canada
- Conducts near-term and long-term reliability assessments of the North American BPS
- Certifies BPS operators as having the knowledge and skills to perform reliability responsibilities
- Maintains situational awareness of events and conditions that may threaten BPS reliability
- Coordinates efforts to improve physical and cyber security for the BPS of North America
- Conducts detailed analyses and investigations of system disturbances and events as well as measures ongoing trends to determine root causes, uncover lessons learned, and issue findings as recommendations, guidelines, and actions to mitigate and control risks to reliability
- Identifies and prioritizes risks to reliability and uses a broad toolkit to mitigate and control risks to reliability, including the potential need for new or modified Reliability Standards, improved compliance monitoring and enforcement methods, or other initiatives

Delegated Authorities

In executing its responsibility, NERC delegates certain authorities to the Regional Entities to perform aspects of the ERO functions described through delegation agreements. FERC has approved delegation agreements between NERC and the six Regional Entities. These agreements describe the authorities delegated and responsibilities assigned to the Regional Entities in the United States to address, among other things: (1) developing regional Reliability Standards; (2) monitoring compliance with and enforcement of Reliability Standards (both North American-wide and regional); (3) registering owners, operators, and users of the BES and certifying reliability entities (Reliability Coordinators [RCs], Balancing Authorities [BAs], and Transmission Operators [TOPs]); (4) assessing reliability and analyzing performance; (5) training and education; (6) event analysis and reliability improvement; and (7) situation awareness and infrastructure security. NERC expects Regional Entities whose territories and geographic footprints 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 FPA Section 215, as added by the Energy Policy Act of 2005,⁴ and FERC's regulations and orders pursuant to Section 215. In Canada, NERC's authorities are established by MOUs and regulations previously mentioned. In this Business Plan and Budget (BP&B), *Exhibit A – Application of NERC Section 215 Criteria* summarizes the major activities NERC proposes to undertake in 2023 and the approved FPA Section 215 criteria applicable to such activities.⁵

Funding

FPA Section 215 and FERC's regulations specify procedures for NERC's funding in the United States. NERC's annual BP&B is subject to FERC approval and, once approved, NERC's annual funding is provided primarily through assessments to load-serving entities. These assessments are allocated 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. Regional Entity funding requirements are addressed separately in their respective BP&Bs, which must be reviewed and approved by NERC and FERC.

⁴ Section 215 of the FPA, 16 United States C. 824o.

 $^{^{5}}$ North American Electric Reliability Corporation, Order on Compliance, 143 FERC \P 61,052 (2013).

ERO Enterprise Model and Transformation

The vision of the ERO Enterprise, which is comprised of NERC and the six Regional Entities, is a highly reliable and secure North American BPS. Its mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. The ERO Enterprise is a collaborative group of organizations with distinct roles between NERC and the Regional Entities. The ERO Enterprise strives for consistency where necessary, but recognizes that each Regional Entity addresses reliability in unique ways based on its own challenges and stakeholder needs. This model effectively blends a continent-wide scope with flexibility and responsiveness, and provides the resources to tackle emerging issues while simultaneously enabling innovative and distinctive approaches to reliability risks and challenges.

Within the ERO Enterprise model, NERC has unique responsibilities to oversee ERO program areas, set qualifications and expectations for the performance of delegated activities, and assess, train, and give feedback to corresponding Regional Entity programs. The Regional Entities have a mirrored set of responsibilities, providing input into the overall development of each program area, providing training and development to meet qualifications, and ensuring delegated functions are completed. Both NERC and the Regional Entities have an obligation to meet professional standards of independence and objectivity.

As the ERO Enterprise continues to mature, the organization is working on a transformation initiative to further leverage resources, enhance communication and collaboration, and ensure grid reliability. A set of declarations have been established, committing the ERO Enterprise to:

- Work together as one team and honor each of its roles
- Actively support ERO Enterprise activities while eliminating unnecessary duplication of work
- Collaborate to develop clear and consistent guidance across the ERO Enterprise
- Share information, knowledge, and resources across the ERO Enterprise
- Develop and share harmonized messages across ERO Enterprise communications
- Support innovation, initiatives, and the sharing of best-practices across the ERO Enterprise

Building upon these commitments, the ERO Enterprise is guided by the value drivers shown in the graphic below and engages in a collaborative process to accelerate its transformation through diverse activities, including ERO Enterprise-wide town halls, joint leadership training sessions, and work among ERO Enterprise Collaboration Groups.



ERO Enterprise Strategic and Operational Planning

NERC and the Regional Entities are continually refining their individual and collective operating and governance practices in support of strategic and operational goals and objectives that are designed to ensure the ERO fulfills its statutory obligations. This collaboration is done while acknowledging the unique differences across the Regions, and the different corporate and governance responsibilities of each entity.

In 2019, ERO Enterprise leadership came together to revise the <u>ERO Enterprise Long-Term Strategy</u> as part of an effort to streamline its strategic and operational documents and ensure alignment with the NERC Reliability Issues Steering Committee's (RISC's) currently identified BPS risks. This strategy, which was approved by the Board on December 12, 2019, includes the following strategic focus areas:

- 1. Expand risk-based focus in all standards, compliance monitoring, and enforcement programs
- 2. Assess and catalyze steps to mitigate known and emerging risks to reliability and security, leveraging the RISC's biennial *ERO Reliability Risk Priorities Report*
- 3. Build a strong, Electricity Information Sharing and Analysis Center (E-ISAC)-based security capability
- 4. Strengthen engagement across the reliability and security ecosystem in North America
- 5. Capture effectiveness, efficiency, and continuous improvement opportunities

As part of the business planning and budgeting process, NERC and the Regional Entities identify and discuss departmental goals and activities to ensure alignment with the long-term strategy and harmonization across the ERO Enterprise where appropriate. Program area narratives in each BP&B may reference how activities support each of the strategic focus areas.

Since risks to reliability and security are fluid and can be impacted by recent events, NERC and each Regional Entity may also create annual work plan priorities that summarize the most critical goals and objectives for the year. In many cases, these work plan priorities are also used for individual, departmental, and company performance measurement.⁶

⁶ The <u>2022 ERO Work Plan Priorities</u> were approved by the Board in November 2021. NERC management and the Board evaluate annual work plan priorities throughout the year.

Introduction and Executive Summary

TOTAL RESOURCES (in whole dollars)									
		2023 Budget		U.S.		Canada		Mexico	
Statutory FTEs		236.88							
Non-statutory FTEs		-							
Total FTEs		236.88							
Statutory Expenses	\$	97,568,689							
Non-Statutory Expenses	\$	-							
Total Expenses	\$	97,568,689							
Statutory Fixed Asset Additions	\$	6,224,000							
Non-Statutory Fixed Asset Additions	\$	-							
Total Fixed Asset Additions	\$	6,224,000							
Statutory Funding(Use) of Reserves	\$	(1,179,488)							
Non-Statutory Funding of Reserves	\$	-							
Total Change in Working Capital	\$	(1,179,488)							
Net Proceeds from Financing Activities	\$	(2,791,076)							
Total Statutory Funding Requirement	\$	99,822,125							
Total Non-Statutory Funding Requirement	\$	-							
Total Funding Requirement	\$	99,822,125							
		TOTAL		US		CANADA		MEXICO	
Statutory Funding Assessments	\$	87,074,681	\$	78,211,560	\$	8,556,859	\$	306,262	
Non-Statutory Fees	\$	-	\$	-	\$	-	\$	-	
NEL		4,557,293,470		4,019,501,865		522,250,671		15,540,934	
NEL%		100.00%		88.20%		11.46%		0.34%	

2023-2025 Business Plan and Budget Assumptions

2023-2025 Business Planning Overview

From compromised supply chains to several cyber breaches to cold and record heat weather-related events, there has been an alarming increase in reliability, resilience, and security risks to the bulk power system (BPS). In support of the Electric Reliability Organizations (ERO) Enterprise's mission to assure the effective and efficient reduction of risks to the reliability and security of the grid, and with consideration to the extraordinary costs to nearly 400 million North American citizens if responsive and preventive measures are not taken to address these risks, NERC created a three-year business plan that is proactive in our approach, focusing on investments where the ERO can most influence change.

In the last quarter of 2021, NERC leadership and the Board of Trustees (Board) came together to examine industry dynamics, conduct a strengths, weaknesses, opportunities, and threats (SWOT) analysis, and align on strategic priorities and focus areas. Through the first half of 2022, NERC leadership and the Board conducted extensive outreach with industry stakeholders to share and gain feedback on the 2023–2025 areas of focus. In parallel, NERC leadership developed budget assumptions to support the three-year plan, which were shared in detail with the Board and discussed with key stakeholders, including the Member Representatives Committee (MRC) Business Plan and Budget (BP&B) Input Group, the Electricity Information Sharing and Analysis Center's (E-ISAC's) Member Executive Committee (MEC), and industry trades and forum representatives.

NERC's proposed business plan for 2023–2025 does the following:

- Ensures NERC has the resources to address two critical emerging risks to BPS reliability, resilience, and security while leveraging the work of key partners:
 - 1. Evolving energy availability concerns as the resource mix changes and climatic conditions become more extreme
 - 2. Heightened cyber security risks driven by supply chain vulnerabilities occurring at an unprecedented rate
- Retools NERC's approach to mitigating risk through a more nimble, standard setting process that honors the important role of stakeholders in Reliability Standards development
- Invests in NERC's own infrastructure to reduce enterprise and cyber risks related to business activities and systems and create a more sustainable organization

The business plan does not:

- Duplicate the work of other partners, but rather leverages their expertise
- Anticipate any change to the regulatory framework around natural gas reliability and security
- Address new, evolving risks in technical areas NERC has not engaged in the past (e.g., 6 GHz communications)
- Staff a proprietary outreach program, but rather guides, leverages, and relies on the Regional Entities to lead relationships with key state and provincial authorities
- Assume all technical and regulatory activities "in house;" rather, NERC will continue to leverage
 the total reliability ecosystem, including stakeholder subject matter expert resources through the
 technical committees and standards development processes

The business plan's value proposition:

- Provides the framework and plans for NERC and the industry to get ahead of key grid transformation risks by defining key performance outcomes
- Is responsive to key needs of the security role envisioned for the E-ISAC expressed by industry through the MEC and government partners, including the Department of Energy (DOE) and its Office of Cybersecurity, Energy Security, and Emergency Response (CESER)
- Leverages technology and expertise to drive more comprehensive analytics around reliability assessments (i.e., more complete assessments of energy availability) and key institutional risks (e.g., improving the cyber security posture of NERC's own systems and applications)
- Creates the capacity for better analytics and focus to manage and improve the productivity of NERC's back-office systems while reducing risk of human error due to current manual processes
- Continues a strong focus on driving efficiency while assuring effectiveness of ERO programs while embedding risk-informed thinking into programs and processes

The business plan is centered on four priority areas of focus:

- Energy: Tackle the challenge of grid transformation and climate change-driven, extreme weather
- **Security:** Move the needle by focusing on supply chain, Information Technology (IT) and Operational Technology (OT) system monitoring, cyber design, and evolution of the Critical Infrastructure Protection (CIP) Standards
- Agility: Tool the company to be more nimble in key areas, particularly standards development and internal operational processes, re-visit the 2013 Federal Energy Regulatory Commission (FERC) settlement agreement,⁷ and explore alternate funding mechanisms
- **Sustainability:** Invest in ERO systematic controls, eliminate single points of failure, strengthen succession planning, and ensure robust cyber security protections for all systems

Historical Budget and Assessment Overview

As reflected in the table below, NERC has managed growth of additional projects, capabilities, and responsibilities in a fiscally sensible manner. Over the 10-year period of 2013–2022, NERC's average annual budget and assessment increase was 5.7%. During this period, NERC added the Cybersecurity Risk Information Sharing Program (CRISP), significantly expanded E-ISAC programs, improved the analytics behind routine reliability assessments, and implemented Align and the ERO Secure Evidence Locker (SEL) for the ERO Enterprise Compliance Monitoring and Enforcement Program (CMEP). This growth in budget masked multiple underlying productivity gains as programs matured, such as the reduction of personnel dedicated to enforcement processing and the elimination of NERC's proprietary investigations team.

	2013	2014	2015 ⁽¹⁾	2016	2017	2018	2019 ⁽²⁾	2020	2021	2022 ⁽³⁾	Avg Annual
NERC Total Budget (millions)	\$54.3	\$56.4	\$66.7	\$67.2	\$69.6	\$73.1	\$79.9	\$82.7	\$82.9	\$88.8	
Annual Increase %		3.9%	18.3%	0.7%	3.6%	5.0%	9.3%	3.5%	0.2%	7.1%	5.7%
NERC Assessment (millions)	\$47.6	\$51.4	\$55.3	\$57.1	\$59.9	\$62.9	\$68.9	\$72.0	\$72.0	\$78.4	
Annual Increase %		8.0%	7.6%	3.3%	4.9%	5.0%	9.5%	4.5%	0.0%	8.9%	5.7%

^{(1) 2015} Budget increase includes addition of CRISP program (\$9 million)

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⁽²⁾ Budgets in 2019 and prior years do not include net financing activity

^{(3) 2022} Budget, as amended for Atlanta office transition costs

North American Electric Reliability Corporation, Order Approving Settlement Agreement, 142 FERC ¶ 61,042 (2013).

The table reveals some higher historic volatility in budget increases versus assessment increases, particularly in 2015 when NERC added CRISP. However, a large portion of the CRISP cost is funded by CRISP participants and, therefore, did not have a significant impact on assessments. The 2019 budget and assessment increases reflect a spike over historical norms primarily due to increased people and technology resources associated with the *E-ISAC Long-Term Strategic Plan* implementation. The 2021 budget and assessment had no increase, due to the temporary deferral of costs and projects to provide industry relief due to the financial uncertainty associated with the COVID-19 pandemic.

Additionally, over the past 10-years, NERC's average annual increase in full-time equivalents (FTEs) was just over 2.0%. The growth was entirely in the E-ISAC and CRISP, IT, and reliability assessments, analysis, and analytics program areas. The rest of NERC actually saw a decrease in FTEs, which is largely due to efforts to improve efficiency. Examples of these efforts include:

Optimization across the ERO Enterprise

- Align/SEL implementation to consolidate all ERO Enterprise CMEP activities onto a common, highly secure platform and dramatically increase the security of how registered entity evidence is handled
- Creation of functional collaboration groups between the Regional Entities and NERC, using the expertise inside the ERO Enterprise
- Leveraging ERO Enterprise technical innovation and cybersecurity collaboration, including the
 creation of a collaboration group of NERC and Regional Entity IT professionals charged with
 creating synthetic scale across the ERO Enterprise to share scarce cyber expertise, develop
 common tools where possible, and drive effective and timely mitigation to cyber risks

• Leveraging industry partnerships

- Relied on partnerships with the Electric Power Research Institute (EPRI), Institute of Electrical
 and Electronics Engineers (IEEE), and the Power Systems Engineering Research Center (PSERC)
 to address BPS risks, such as resource availability, photovoltaic modeling, distributed energy
 resources (DER) and inverter-based resource interconnection standards
- Collaborated with the North American Transmission Forum (NATF) and the North American Generator Forum (NAGF) on topics such as facility ratings, pandemic guidance, and supply chain, and with the National Association of Regulatory Utility Commissioners (NARUC) on the interconnection of inverter-based resources
- Continued working closely with our government partners, including the DOE and Department
 of Homeland Security on cyber and physical security, energy analysis, and critical
 infrastructure interdependencies, and the ongoing work related to the current Russian
 invasion of Ukraine

Reimagining work

- Established round-the-clock E-ISAC Watch Operations
- Transformed our workforce, changing where and how work is done

Improving processes with technology

- Launched new analysis platforms, including the E-ISAC Portal and tools, the Risk Registry, and the Situation Awareness for FERC, NERC, and the Regional Entities (SAFNR) tool
- Implemented back-office improvements to payroll, budgeting, performance management, and expense automation systems, and added cloud-based computing

Eliminating work / redeploying resources

- In addition to leveraging partnerships, eliminated some efforts and reallocated resources (e.g., human performance conference, standards and compliance workshop)
- Formed a Reliability and Security Technical Committee (RSTC), which consolidated three committees and their subcommittees, reducing the number of face-to-face meetings and freeing NERC staff to focus on priority risks
- Eliminated NERC's Investigations department, instead relying on the expertise found in the Regional Entities

• Facilities contracts

Achieved Washington, D.C., and Atlanta facility lease savings

2023–2025 Key Budget Assumptions

With the proposed 2023–2025 business plan developed to achieve goals associated with the four areas of focus, NERC is proposing a higher than historical average budget and assessment increase over this time period to deal with a series of new and emerging risks that drive fundamental change in how the grid will need to be planned and operated (the intersection of extreme, and not necessarily rare, weather and grid transformation) and a step change in the severity of the cyber (and physical) security landscape. However, the financial plan assumes financing a portion of the capital technology investments and the use of reserves to smooth the assessment impact of the budget increases.

Technology Strategy

The Technology Strategy is a multi-year plan intended to show how the valuable NERC resources (time, talent, and dollars) will support the mission of the ERO Enterprise. The plan is flexible should the need arise to push projects out to subsequent years or should other technology resource impacting events occur (e.g., supply chain compromise), causing a need to rapidly shift attention to other areas. The plan addresses ever-emerging cyber security risks, enables agile business processes, mitigates ERO Enterprise and corporate risks, and delivers long-term benefits across the program areas. This plan aligns with the four priority areas of focus, and adheres to the following for investment justification:

- Flexible: Responsive to emerging issues (e.g., cyber) by shifting investments and priorities
- **Measureable:** Large investments are vetted through the IT Investment Review Policy and Procedure for justification and expected benefits
- Business-unit driven: Investments are mapped to the NERC program areas and support primary mission objectives
- Aligned to key business drivers: Each investment is linked to a key set of business drivers that align with the ERO Enterprise value drivers (see page vi above)

Priority Focus Area	Key Technology Investments
Energy	 Enhancements to existing systems with a focus on BPS reliability, data analytics, and cyber security: Centralized Organization Registration ERO System (CORES), Generator Availability Data System (GADS), Transmission Availability Data System (TADS), Reliability Assessment Data System (RADS), The Event Analysis Management System (TEAMS), and SAFNR New capabilities and FERC mandates, such as GADS Solar
	New Capabilities and Like Mandates, such as GADS Solar
Security	 Security reviews of legacy applications, with decisions on retirement or replacement as applications age and more secure technologies evolve
	Cyber security capabilities for NERC, the ERO Enterprise, the E-ISAC, and CRISP
	Identity Access Management (IAM) and Privileged Access Management (PAM) technology, Data Loss Prevention (DLP), and procedural controls
	Mobile Device Management for protection of email and other applications
Agility	Efficiencies in the Internal Audit and Corporate Risk Management areas using currently licensed software, extending the reach of current platform investments
	 Expansion of specialized infrastructure, including collaboration technologies (e.g., Microsoft Teams, WebEx, audio/visual (A/V) equipment) to extend and support ERO Enterprise collaboration and strategic workforce development
Sustainability	Enhancing disaster recovery capability to mitigate ransomware attacks and payments
	Expansion and modernization to cloud-based human resources and finance systems to ensure adherence to best practices, support internal audit controls, and further the benefits of the NERC 2.0 Connected Workforce model
	Modernization and support of core IT infrastructure to keep abreast of evolving security features and reduce support costs that come with aging systems
	Support of the CMEP with continued evolution of Align, ERO SEL, CORES, and NERC Membership systems and applications
	Expansion of existing core service agreements and desktop infrastructure (e.g., Microsoft service agreements, laptops, cell phones, etc.) to support the increase in NERC staff, contractors, and expansion of secure remote work capabilities

The incremental technology investments referenced above span across NERC's Statutory Program and Administrative Program departments (including IT itself) and are intended to support and further the activities necessary for the four areas of focus. The associated expenses are reflected in several cost categories of NERC's budget, primarily capitalized software (fixed assets), software licenses and support (budgeted in Office Costs), and contractors and consultants. The resulting total NERC business technology spend, exclusive of FTEs, is expected to increase from approximately \$14M in 2022 to \$25M in 2025. This projected level of spend was developed "bottom up" but also aligns with spending benchmarks obtained from Gartner Group for companies of NERC's size with comparable activities.

People Strategy

NERC is a knowledge-based organization. As the challenges to the reliability and security of the BPS evolve at the same time as the competition for talent increases, NERC's ability to retain, engage, and attract top talent is critical. In support of the 2023–2025 business plan, the following high-level workforce planning process was conducted:

- Identified the skills needed to support the four areas of focus
- Considered existing staff skillsets and succession planning
- Identified gaps between current and needed skills, as well as where there were single threaded positions, and how to further optimize current resources
- Created a plan to fill these gaps using the following strategies:
 - Build Develop current staff in the time frames needed
 - Borrow Use contractors and consultants
 - Buy Identify future FTE requests

The resulting proposed People Strategy consists of increases to merit salary, health insurance, and other benefits over the next three years for existing employees, and anticipates hiring 37 additional employees (34.8 FTEs, which incorporates a 6.0% vacancy rate) to support the four areas of focus, primarily in Security, along with Energy and Sustainability.

Focus Area	2023	2024	2025	TOTAL
Energy	3	4	1	8
Security	7	6	6	19
Agility	0	1	1	2
Sustainability	4	1	3	8
TOTAL	14	12	11	37
FTEs with 6% vacancy rate	13.2	11.3	10.3	34.8

NERC's employee base consists primarily of professional skilled labor, with a relatively high concentration of cyber security and IT employees. NERC is scheduled to perform a market compensation study for all staff positions before the 2023 merit review cycle. However, for the 2023 budget and 2024 and 2025 projections, NERC is currently assuming an annual weighted average merit adjustment increase in compensation of 4.0% for the general workforce population, with higher increases for cyber and IT resources, resulting in a 5.5–6.0% annual average assumption. In addition to recent higher inflation rates, this is driven by current indications of market supply and demand for cyber and IT talent. Having the ability to provide these higher than historical merit and market-driven compensation increases is vital to attracting and retaining top talent. Medical and dental premium cost estimates are based on market data provided by the company's benefits consultant. No other changes to retirement or other benefit plans have been assumed.

The total projected three-year increase in personnel costs will be approximately \$17.4M over the 2022 budget of \$52.0M. Approximately \$8.1M of this increase is attributed to the new FTEs proposed to be added in 2023–2025 and \$9.3M is the projected increase for the current workforce. A breakdown of 2023 personnel expenses is provided in *Table B4 – Personnel*.

Office Facilities and Rent

NERC will realize lower annual office rent expenses of approximately \$300k per year in 2023–2025 compared to previous rent projections due to receiving lease concessions related to the Atlanta office, which will be applied to budgeted rent (funded by assessments) for the remaining term of the Atlanta office lease, which ends in October 2025. Some other facility-related costs are projected to increase slightly during the three-year time period, which will partially offset some of the rent savings. A breakdown of 2023 rent expenses is provided in *Table B7 – Rent*.

The 2025 projection assumes continued development of capital software projects under the Technology Strategy, as well as lease financed and out-of-pocket expenditures for a potential new Atlanta office space after the current lease expires. The 2025 projection assumes the acquisition of up to \$2.0M of A/V equipment (financed through a new lease, with payments starting in 2026), \$800k in new furniture, \$600k in network and wireless infrastructure, and \$200k for legal and professional services.

Meetings and Travel

Meetings and travel expenses were reduced significantly (\$1.1M) in the 2021 budget from the 2020 budget in response to the COVID-19 pandemic. The 2022 budget was increased by \$400k (18.5%) over 2021 and the 2023 budget reflects an additional increase of \$537k over the 2022 budget, to a total of \$3.1M. The 2023 budget assumes two in-person meetings for the Board and RSTC and two hybrid meetings. In-person meetings have also been planned for the annual ERO Enterprise Leadership Conference and the Reliability Issues Steering Committee's (RISC's) Reliability Leadership Summit in 2023. While virtual attendance at meetings will be encouraged, NERC program areas have performed detailed travel projections by employee and event and included an assumed growth in FTEs to inform the requested budget increase in 2023. A breakdown of 2023 meeting and travel expenses is provided in *Table B5 – Meetings & Travel*.

Current projections in 2024 and 2025 show a more moderate increase in meetings and travel of \$100k and \$154k, respectively. With these projections, the 2025 travel budget would still be slightly below the pre-pandemic budget level; however, the unit cost of travel is increasing significantly from pre-pandemic levels, which means a net reduction in travel events but a higher unit cost per event.

Contractors and Consultants

Contractor and consultant expenses are projected to increase \$4.5M (32.6%) over the three-year period. Of this total amount, the costs related to the CRISP contract with the Pacific Northwest National Laboratory (PNNL) are estimated to increase by \$1.9M (33.1%). These PNNL costs are funded completely by CRISP participants and do not impact assessments. IT contractor and consultant costs are projected to increase \$1.7M (96.0%) over the three-year period, primarily to support the Technology Strategy. E-ISAC contractor and consultant costs, excluding CRISP, are projected to increase by \$914k (42.2%) primarily due to GridEx support expenses (2025 is a GridEx year, 2022 is an off year) and other anticipated contractor and consultants work including increased physical and OT security analysis projects. A breakdown of 2023 contractor and consultant expenses is provided in *Exhibit B – Contractor and Consultant Costs*.

Fixed Asset (Capital) Budget and Capital Financing

NERC's fixed asset budget includes IT equipment and servers, including leased equipment (capital lease assets), and capital software. The fixed assets budget is projected to increase \$5.7M (116.7%) over the three-year period, primarily due to the capital software projects related to the Technology Strategy, as well as lease financed and out-of-pocket expenditures for a potential new Atlanta office space in 2025 (discussed above). A breakdown of 2023 fixed asset expenditures is provided in *Table B-12 – Fixed Assets*.

NERC's capital financing program was established to fund certain ERO Enterprise software projects to spread these investment costs over multiple years and reduce the volatility of annual assessments. Due to the increased spending on capital software projects in 2023–2025, a portion of these projects are proposed to be financed with a 60-month loan amortization to level the assessment percentage increase over the next three years. Borrowing proceeds and related debt service (principal and interest) are included in the 2023–2025 budget and projections. The table below shows the assumed loan borrowing related to the Technology Strategy in 2023–2025.

Year	Capital Software Investment \$	Loan Financing Amount
2023	\$5.3M	\$4.0M
2024	\$6.2M	\$4.0M
2025	\$6.3M	\$2.5M

Further information on NERC's capital financing program can be found in *Exhibit B – Capital Financing*.

2023–2025 Reserve Funding Assumptions

With this three-year financial plan, the annual increase from 2022 to 2023 represents the largest, single-year percentage increase of the three years. The use of \$2.0M in reserve funding, comprised of \$1.0M from the Assessment Stabilization Reserve (ASR)⁸ and \$1.0M from the Operating Contingency Reserve (OCR), is proposed in 2023 to reduce the assessment increase. A use of \$500k of OCR is assumed in 2025 to help fund any one-time out-of-pocket equipment or furnishing costs related to a potential Atlanta office relocation. Using this reserve funding strategy, along with capital financing above, annual assessment increases are projected to stay between 11.1% and 11.6% during the three-year period.

2023–2025 Financial Summary

The table below reflects the preliminary estimates of the three-year budget and assessment amounts, with annual dollar and percentage increase amounts, and recommended reserve usage in 2023 and 2025. For more detailed information, see *Table B-13 – 2024 and 2025 Projections*.

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	2022 ⁽¹⁾	2023	2024	2025	Notes	
Annual Total Budget	\$88.8	\$101.0	\$110.1	\$122.6		
\$ annual increase	\$5.9	\$12.2	\$9.1	\$12.5		
% annual increase	7.2%	13.7%	9.0%	11.4%	Annual avg. 2023-2025	11.4%
Annual Total Assessment	\$78.4	\$87.1	\$97.2	\$108.0		
\$ annual increase	\$6.4	\$8.7	\$10.1	\$10.8		
% annual increase	8.9%	11.1%	11.6%	11.1%	Annual avg. 2023-2025	11.3%
Recommended Reserve Usage		\$2.0		\$0.5		

^{(1) 2022} budget includes amendment for Atlanta office lease costs (funded by reserves)

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⁸ NERC Rules of Procedure (ROP) Section 1107.2 specifies that penalties received from July 1 through the following June 30 will offset U.S. assessments in the subsequent budget period. In 2015, the Board and FERC approved the creation of the ASR, which is funded by penalties received, and was established to narrow the gap between annual budget and assessment percentage changes that result from year-to-year variations in penalty collections. The actual amount of the contribution, as well as releases from the fund to reduce assessments, are determined as part of NERC's BP&B process and must be approved by the Board and FERC each year.

2023 Business Plan and Budget Summary

Budget Reporting Format and Presentation

NERC and the Regional Entities' budgets are comprised of both operating and fixed asset addition (fixed asset, or capital) costs as well as net financing activity, if applicable. Operating costs generally include personnel, contractor support, consulting, meetings, travel, office space, software licensing, communications, and other customary services to support office operations. Fixed assets primarily reflect investments in equipment and software to support operations, including investments in applications and infrastructure to facilitate improved business processes and efficiency. These operating and fixed asset costs, as well as corresponding funding and financing activity, are shown on a Statement of Activities and Fixed Asset Expenditures report (SOA report) in this BP&B document, which is provided at both the total entity and departmental levels. These reports include funding, expenses, and financing activity for the current budget year and prior budget year to show year-over-year changes.

Overview of 2023 Budget and Funding Requirements

NERC's 2023 expense and fixed asset budget, including financing activity, is approximately \$101.0M, which is an increase of approximately \$12.2M (13.7%) from the 2022 budget. Total expenses are increasing approximately \$12.6M (14.8%) over 2022. The total fixed asset budget is approximately \$6.2M, an increase of \$1.3M (26.5%) from 2022. The fixed assets budget includes the acquisition of \$130k in capital lease assets (primarily for laptop replacements), offset by corresponding lease proceeds reflected in financing activity. As discussed in the capital financing assumptions above, NERC is also proposing to finance \$4.0M of capital software expenditures in 2023, which is also reflected by corresponding loan proceeds in financing activity. Approximately \$11.9M (11.8%) of NERC's 2023 budget is related to CRISP, with 80.4% of the CRISP budget funded by participating utilities and the remainder funded through assessments. See Section A – Electricity Information Sharing and Analysis Center for more discussion on E-ISAC and CRISP funding.

NERC's proposed 2023 assessment is approximately \$87.1M, which is an increase of approximately \$8.7M (11.1%) from the 2022 assessment. Factors contributing to the difference between the proposed 2023 budget and assessment include assumptions regarding other funding sources, such as third-party funding for CRISP and fees collected to fund the System Operator Certification and Credential Maintenance program. As discussed in the 2023–2025 reserve assumptions above, the proposed assessment reflects a proposed release of \$2.0M from reserves to offset 2023 assessments, comprised of \$1.0M from the ASR and \$1.0M from the OCR. The composition of ASR and OCR is considerate of the fact that the ASR consists of prior U.S. penalty dollars and, therefore, the release of those funds only benefits U.S. load-serving entities (LSE). The allocation of the assessment among U.S. and Canadian entities will also be impacted by the final determination of credits for certain costs for Canadian entities pursuant to NERC's Expanded Policy on Allocation of Certain Compliance and Enforcement Costs, which was included in NERC's filing to the FERC requesting acceptance of the NERC 2009 BP&B.

2023 Program Budget and FTE Comparisons

The following table shows a 2023 versus 2022 total budget comparison by program area. The amounts reflect all direct and indirect departmental costs, including fixed asset expenditures. Costs incurred for Administrative Programs (overhead) are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs.

⁹ North American Electric Reliability Corp., Docket No. RR08-6-000, Attachment 16 (filed August 22, 2008)

2023 versus 2022 Total Budget by Program

				0 ,			
		2022		2023			
Total Budget		Budget	Budget			Increase (Deci	rease)
Reliability Standards	\$	9,541,634	\$	10,349,112	\$	807,478	8.5%
CMEP	Y	19,699,720	Y	21,268,510	Y	1,568,790	8.0%
RAPA		14,922,693		18,154,510		3,231,817	21.7%
Event Anlaysis		3,819,053		4,107,435		288,382	7.6%
Situation Awareness		5,118,788		6,010,996		892,208	17.4%
Personnel Certification		1,843,435		1,961,763		118,328	6.4%
Training and Education		1,035,557		1,123,146		87,589	8.5%
NERC Budget, excluding E-ISAC	\$	55,980,879	\$	62,975,472	\$	6,994,593	12.5%
E-ISAC (non-CRISP)	\$	23,862,079	\$	26,118,401	\$	2,256,322	9.5%
E-ISAC (CRISP)		8,985,326		11,907,740		2,922,414	32.5%
Total E-ISAC Budget	\$	32,847,405	\$	38,026,141	\$	5,178,736	15.8%
Total Budget	\$	88,828,284	\$	101,001,613	\$	12,173,329	13.7%

The budgets for all program areas are increasing primarily due to one or a combination of the following: (1) assumptions related to the People Strategy discussed above, particularly incremental FTEs (see table below), which, for some programs, may also result in higher allocations of indirect costs from the Administrative Programs, and (2) capital software projects related to the Technology Strategy discussed above, of which a significant portion are budgeted in the IT area and allocated as indirect costs to the statutory program areas. E-ISAC is also increasing due to additional contractor and consultants costs, primarily for GridEx (2023 is a GridEx year, 2022 is an off year) and increased physical and OT security analysis projects. The increase for CRISP is mainly attributable to increase costs for the contract with PNNL, which is completely participant funded, and market pressures on liability insurance. Further information is available in Section A – 2023 Business Plan and Budget Program Area and Department Detail.

The following table presents a 2023 versus 2022 comparison of budgeted FTEs by department, reflecting 2023 additions, reallocations, and attrition assumptions. The number of FTEs represents the number of employees employed full time during the year, plus any employees employed part time or during a portion of the year, converted to a full-time basis. Also see *Appendix 1 – NERC Staff Organization Chart*.

2023 versus 2022 FTEs by Department

	2022	2023	Increase
FTEs	Budget	Budget	(Decrease)
Reliability Standards	19.74	19.74	-
CMEP	33.84	34.78	0.94
RAPA	26.32	29.14	2.82
Event Anlaysis	6.58	6.58	-
Situation Awareness	7.52	7.52	-
Personnel Certification	2.82	2.82	-
Training and Education	1.88	1.88	-
Administrative Programs	81.08	88.55	7.47
NERC FTEs, excluding E-ISAC	179.78	191.01	11.23
E-ISAC (non-CRISP)	40.01	40.14	0.13
E-ISAC (CRISP)	3.94	5.73	1.80
Total E-ISAC FTEs	43.95	45.87	1.93
Total FTEs	223.72	236.88	13.16

To support the priority areas of focus, in 2023 NERC is adding 14 new positions (see the People Strategy discussion above), or 13.2 FTEs. The table above reflects these positions as follows:

- CMEP The increase of 0.94 FTEs is for increased CIP audit support and expertise
- RAPA The increase of 2.82 FTEs is for support for probabilistic assessments and incorporation of cyber analysis into system planning with the development of new cyber design techniques
- E-ISAC and CRISP The increase of 1.93 FTEs is for increased analytical capabilities and leveraging
 of threat intelligence, support for OT initiatives and natural gas partnerships, and CRISP
 enhancement and expansion
- Administrative Programs The 7.47 increase in FTEs is for increased support in the areas of cyber security, cloud computing, internal controls, procurement, and communication

2023 Reserves

At the end of 2023, NERC is projecting a total reserve budget of \$14.6M across all categories of reserves. This is an increase of \$5.9M (68.3%) from the total reserve amounts budgeted for the end of 2022 in NERC's 2022 Budget Amendment. This increase is primarily due to reserves not being used for an Atlanta office relocation, and the creation of a CRISP operating reserve. The reserve categories are as follows:

- Future Obligation Reserve Includes funding that has been received to satisfy future obligations under lease, credit, loan, or other agreements to which the company is a party. This reserve is budgeted to be \$2.6M at the end of 2023.
- System Operator Certification Reserve Includes surplus funding from fees collected for the System Operator Certification and Credential Maintenance program that are above incurred expenses and shall be used solely for the program needs. The 2023 System Operator Certification Reserve is budgeted to be \$563k at the end of 2023 and is comprised primarily of existing funds.
- CRISP Reserves Represents funds dedicated to support CRISP. These reserves are established
 pursuant to a CRISP budget agreed to and funded entirely by utilities participating in CRISP. These
 reserves have no impact on assessments and are segregated from other reserves pursuant to the
 terms of the CRISP agreements. CRISP reserves are budgeted to be \$2.2M at the end of 2023.¹⁰
- OCR Includes both general working capital funds resulting from day-to-day operations¹¹ and additional funds for contingencies that were not anticipated. NERC's current policy requires an OCR target of 3.5–7.0% of the company's total expense and fixed asset budget (less CRISP and System Operator Certification budgets), except as otherwise approved by the Board. This percentage is calculated against NERC's total budget for operating and fixed asset expenditures, less those costs related to CRISP and System Operator Certification, each of which has a separate reserve category. NERC is recommending to release \$1.0M of funds from the OCR to offset 2023 assessments, and the OCR is budgeted to be \$7.8M at the end of 2023. This is 8.9% of budgeted operating and fixed asset costs, which is slightly higher than the target maximum range.
- ASR To date, this reserve has been funded entirely by previously received penalties from U.S. entities. NERC did not collect any penalties during the 12 months ending June 30, 2022, and is not proposing to deposit any funds into the ASR. NERC management is recommending to release \$1.0M of funds from the ASR to offset 2023 assessments, and the ASR is projected to have a balance of \$1.5M at the end of 2023.

See *Table B-1 – Total Reserves Analysis* for an analysis of projected reserve activity for 2022 and 2023 for all reserve categories.

The following SOA report compares the NERC 2022 budget, 2022 year-end projection, and 2023 budget.

¹⁰ CRISP reserves historically were limited to the CRISP Defense Fund Reserve, which is intended to fund any expenses related to investigation and defense in connection with a claim pertaining to the CRISP agreement between NERC and participating utilities. In an Order issued July 8, 2022, the Commission approved NERC's request for approval to (1) annually redirect underruns of the prior year's CRISP budget to the CRISP Operating Reserve, and (2) redirect underruns from CRISP OT pilot budgeted funds to the CRISP Special Projects Reserve. North American Electric Reliability Corp., 180 FERC ¶ 61,013 (Letter Order July 8, 2022).

¹¹ As in past BP&Bs, NERC is not budgeting the use of working capital funds in 2023 for cash flow needs since assessments are billed and paid quarterly throughout the year. If an unforeseen revenue deficiency were to arise, NERC maintains a \$4M line of credit with a major financial institution. As further described above, NERC is recommending a planned release of \$1.0M of contingency funds from the OCR to offset 2023 assessments. The "Change in Working Capital" referenced on the financial tables in this document reflects this release of \$1.0M from the OCR as well as the projected net changes for the System Operator and CRISP reserves, which result from the funding model for those programs. See Table B-1 for details.

				s and Fixed Assection and 202							
			STA	TUTORY							
		2022 Budget		2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)	% Inc 2023 Over 2022
Funding											
NERC Funding											
NERC Assessments	\$	78,387,280	\$	78,387,280	\$	-	\$	87,074,681	\$	8,687,400	
Penalties Released*	_	-		-	_	-	_	1,000,000	_	1,000,000	40.40/
Total NERC Funding	\$	78,387,280	\$	78,387,282	\$	-	\$	88,074,681	\$	9,687,400	12.4%
Third-Party Funding (CRISP)	\$	7,928,423	\$	8,538,106	\$	609,683	\$	9,569,170	\$	1,640,747	
Testing, Renewal, & Continuing Ed Fees		1,756,723	·	1,732,452	·	(24,271)	·	1,781,775	·	25,052	
Services & Software		60,000		60,000		-		60,000		-	
Miscellaneous		60,000		60,000		-		260,000		200,000	
Interest & Investment Income		76,500		30,000		(46,500)		76,500		=	
Total Funding (A)	\$	88,268,926	\$	88,807,840	\$	538,914	\$	99,822,125	\$	11,553,199	13.1%
Expenses											
Personnel Expenses											
Salaries	\$	39,557,528	\$	39,684,470	\$	126,943	\$	44,250,356	\$	4,692,828	
Payroll Taxes		2,310,836		2,277,286		(33,550)		2,513,603		202,767	
Benefits		6,038,487		5,924,211		(114,276)		6,624,553		586,066	
Retirement Costs		4,059,585		3,950,861		(108,724)		4,629,894		570,309	
Total Personnel Expenses	\$	51,966,435	\$	51,836,828	\$	(129,607)	\$	58,018,406	\$	6,051,971	11.6%
Name time O Translation and											
Meeting & Travel Expenses Meetings & Conference Calls	\$	1,132,550	ċ	964,150	ċ	(168,400)	ċ	1,291,650	ċ	159,100	
Travel	Ş	1,475,500	Ş	1,210,400	Ş	(265,100)	Ş	1,853,900	Ş	378,400	
Total Meeting & Travel Expenses	\$	2,608,050	\$	2,174,550	\$	(433,500)	\$	3,145,550	\$	537,500	20.6%
Operating Expenses, excluding Depreciation											
Contractors & Consultants	\$	13,674,800	\$	14,963,161	\$	1,288,361	\$	17,149,110	\$	3,474,310	
Office Rent		3,243,277		3,191,370		(51,907)		3,022,266		(221,011)	
Office Costs		10,749,222		10,962,139		212,917		12,479,724		1,730,502	
Professional Services		2,488,100		2,918,961		430,861		3,290,596		802,496	
Miscellaneous Total Operating Expenses, excluding Depreciation	\$	144,650 30,300,049	\$	145,148 32,180,780	\$	498 1,880,731	\$	208,783 36,150,479	\$	64,133 5,850,430	19.3%
Total Direct Expenses	\$	84,874,534	\$	86,192,158	\$	1,317,624	\$	97,314,435	\$	12,439,901	14.7%
Indirect Expenses	\$	-	\$	-	\$	-	\$	-	\$	-	
Other Non-Operating Expenses	\$	135,000	\$	117,428	\$	(17,572)	\$	254,254	\$	119,254	88.3%
Total Expenses (B)	\$	85,009,534	\$	86,309,586	\$	1,300,052	\$	97,568,689	\$	12,559,155	14.8%
Change in Net Assets (=A-B)	\$	3,259,392	\$	2,498,254	\$	(761,138)		2,253,436	\$	(1,005,956)	
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	4,918,750	\$	4,169,750	\$	(749,000)	\$	6,224,000	\$	1,305,250	26.5%
Financing Activity											
Financing Activity		(2.100.000)		(2.100.000)				(4.120.000)		(2.020.000)	
Loan or Financing Lease - Borrowing (-)		(2,100,000)		(2,100,000) 925,068		- (74.020)		(4,130,000)		(2,030,000)	
Loan or Financing Lease - Principal Payments (+) Net Financing Activity (D)	\$	1,000,000 (1,100,000)	\$	(1,174,932)	\$	(74,930) (74,932)	\$	1,338,924 (2,791,076)	\$	338,924 (1,691,076)	153.7%
Total Budget (=B+C+D)	\$	88,828,284		89,304,404		476,120	\$	101,001,613		12,173,329	13.7%
Change in Working Capital (=A-B-C-D)	\$	(559,358)		(496,564)			\$	(1,179,488)		(620,130)	
Change at Working Capital (-A-D-C-D)	,	(333,336)	ڔ	(430,304)	ب	32,734	ب	(1,1/3,400)	ڔ	(020,130)	
FTEs		223.72		217.48		(6.24)		236.88		13.16	5.9%

^{*}Penalties Released in the current year reflects the designated amount of funds released from the Assessment Stabilization Reserve to offset U.S. assessments as approved by the NERC Board and FERC. Actual penalties invoiced in the current reporting year are shown as an increase to the Assessment Stabilization Reserve on the reserve summary table and will be reported as income on the audited financial statements in accordance with Generally Accepted Accounting Principles (GAAP).

Section A – 2023 Business Plan and Budget Program Area and Department Detail

Reliability Standards and Power Risk Issue Strategic Management

Reliability Standards and Power Risk Issue Strategic Management (in whole dollars)											
Increase											
Heliototop Stemdends		2022 Budget		2023 Budget		(Decrease)					
FTE Reporting		19.74		19.74		0.00					
Personnel Expenses		3,926,928		4,206,355		279,427					
Direct Expenses	\$	4,321,038	\$	4,689,003	\$	367,965					
Indirect Expenses		4,916,148		5,590,166		674,018					
Other Non-Operating Expenses		-		-		-					
Fixed Asset Additions		508,567		496,464		(12,103)					
Financing Activity		(204,119)		(426,521)		(222,402)					
Total Budget	\$	9,541,634	\$	10,349,112	\$	807,478					

Purpose and Scope

Reliability Standards

The Reliability Standards program carries out the Electric Reliability Organization's (ERO's) statutory responsibility to develop, adopt, obtain approval of, and modify mandatory NERC Reliability Standards (both continent-wide and regional) to assure the Bulk Electric System (BES) is planned, operated, maintained, and secured to minimize risks of cascading failures, avoid damage to major equipment, or limit interruptions of the bulk power system (BPS). The purpose of the Reliability Standards department is to deliver high-quality risk-based Reliability Standards, facilitate continent-wide industry engagement, and support regulatory filings. The group focuses on a risk-based approach to its projects, including ensuring that Reliability Standards are clear, timely, consider costs, effective in mitigating material risks, and do not unnecessarily burden industry with administrative requirements and/or detract from reliability or security. More information on the Reliability Standards program is available on the NERC website.

Power Risk Issue Strategic Management

The overarching purpose of the Power Risk Issue Strategic Management (PRISM) group is to leverage inhouse expertise on Reliability Standards and standards development to implement cross-cutting efforts among NERC functions and the standing and technical committees. This group develops, supports, and prioritizes the ERO Risk Registry, and gauges responses to address reliability risks and work toward monitoring risk mitigation. This group also provides in-house training on Reliability Standards to effectuate a consistent view of their meaning, purpose, and relationship with the various work products of the committees and subcommittees. The PRISM group also conducts statistical analysis around the results of standards to identify potential weaknesses, redundancies, and overall necessity.

2023-2025 Areas of Focus

Key areas of focus for the Reliability Standards program include:

 Developing a more nimble standard setting process that honors the important role of stakeholders in Reliability Standards development

- Addressing cyber security risks by continuing to enhance cyber security Reliability Standards
- Integrating and updating standards to address new risks such as inverters, distributed energy resources (DER), energy management, and fuel management
- Addressing Federal Energy Regulatory Commission (FERC) directives, orders, or special reports

Key areas of focus for PRISM include:

- Analyzing data on the BPS to review generator data for trends, particularly to identify patterns for inverter-based resources that could affect system performance and reliability
- Continuing the efforts of the Energy Reliability Assessment Task Force (ERATF) to address additional items that could impact energy constrained resources.
- Supporting the Reliability Issues Steering Committee (RISC) to implement a new risk prioritization method, hold the Leadership Summits, and release the ERO Reliability Risk Priorities reports
- Revising and enhancing the ERO Risk Registry
- Maintaining technical support for Reliability Standards by advising on new and existing projects
- Owning the Reliability Risk Framework and any necessary updates

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes support for the Standard Balloting System (SBS) application and engineering expertise.

2023 Technology Requirements

The Fixed Assets Additions budget includes funds to enhance PRISM's tool for tracking and ensuring complete visibility to identified risks and related work plan efforts.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase in Indirect Costs for Reliability Standards and PRISM is due the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the Introduction and Executive Summary.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

				ixed Asset Addi		ns					
				and 2023 Budg sssue Strategic		nagement					
Reliability Stati	2022					Variance 2022 Projection			Variance 2023 Budget		
		2022 Budget		2022 Projection		v 2022 Budget Over(Under)		2023 Budget		/ 2022 Budget Over(Under)	
Funding											
NERC Funding											
NERC Assessments Penalties Released	\$	9,530,739 -	\$	9,530,739 -	\$	-	\$	10,338,520	\$	807,781 -	
Total NERC Funding	\$	9,530,739	\$	9,530,739	\$	-	\$	10,338,520	\$	807,781	
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-	
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-	
Services & Software		-		-		-		-		-	
Miscellaneous		-		-		-		-		-	
Interest & Investment Income	_	10,895		3,673	_	(7,222)	_	10,592		(303)	
Total Funding (A)	\$	9,541,634	\$	9,534,412	\$	(7,222)	\$	10,349,112	\$	807,478	
Expenses											
Personnel Expenses											
Salaries	\$	2,951,243	Ś	3,001,995	\$	50,752	Ś	3,144,776	\$	193,534	
Payroll Taxes	Ψ.	183,584	~	178,827	Ψ.	(4,757)	~	200,354	Ψ.	16,770	
Benefits		467,848		460,509		(7,339)		509,360		41,512	
Retirement Costs		324,253		318,210		(6,043)		351,865		27,612	
Total Personnel Expenses	\$	3,926,928	\$	3,959,541	\$		\$	4,206,355	\$	279,427	
		-,,-		-,,-		- ,-	•	, ,			
Meetings & Travel Expenses											
Meetings & Conference Calls	\$	65,000	\$	52,000	\$	(13,000)	\$	75,000	\$	10,000	
Travel		115,000		92,000		(23,000)		150,000		35,000	
Total Meetings & Travel Expenses	\$	180,000	\$	144,000	\$	(36,000)	\$	225,000	\$	45,000	
Operating Expenses, excluding Depreciation											
Contractors & Consultants Office Rent	\$	158,960 -	\$	158,960 -	\$	-	\$	202,739	\$	43,779 -	
Office Costs		52,850		58,890		6,040		52,209		(641)	
Professional Services		-		-		-		-		-	
Miscellaneous		2,300		2,300		-		2,700		400	
Total Operating Expenses, excluding Depreciation	\$	214,110	\$	220,150	\$	6,040	\$	257,648	\$	43,538	
Total Direct Expenses	\$	4,321,038	\$	4,323,691	\$	2,653	\$	4,689,003	\$	367,965	
Indirect Expenses	\$	4,916,148	\$	5,051,436	\$	135,289	\$	5,590,166	\$	674,018	
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$		
Total Expenses (B)	\$	9,237,186	\$	9,375,127	\$	137,942	\$	10,279,169	\$	1,041,983	
Change in Net Assets (=A-B)	\$	304,448	\$	159,285	\$	(145,164)	\$	69,943	\$	(234,505)	
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	508,567	\$	400,667	\$	(107,900)	\$	496,464	\$	(12,103)	
Financing Activity											
Loan or Financing Lease - Borrowing (-)	\$	(290,610)	¢	(292,661)	ć	(2,051)	ς	(549,620)	¢	(259,010)	
Loan or Financing Lease - Borrowing (-) Loan or Financing Lease - Principal Payments (+)	Ą	(290,610) 86,491	ڔ	(292,661) 74,559	ڔ	(2,051)	ڔ	(549,620) 123,099	ڔ	36,608	
Net Financing Activity (D)	\$	(204,119)	\$	(218,102)	¢	(13,983)	Ś	(426,521)	Ś	(222,402)	
Total Budget (=B+C+D)	\$	9,541,634		9,557,692		16,058		10,349,112		807,478	
		9,941,034						10,343,112			
Change in Working Capital (=A-B-C-D)	\$	-	\$	(23,280)	Ş	(23,280)	Ş	-	\$	-	

19.74 19.37

(0.37)

19.74

0.00

FTEs

Compliance Assurance and Organization Registration and Certification

Compliance Assurance and Organization Registration and Certification (in whole dollars)												
			·			Increase						
iteliability Assurance		2022 Budget		2023 Budget		(Decrease)						
FTE Reporting		21.62		22.56		0.94						
Direct Expenses	\$	6,492,428	\$	6,932,394	\$	439,966						
Indirect Expenses		5,384,352		6,388,761		1,004,409						
Other Non-Operating Expenses		27,500		16,627		(10,873)						
Fixed Asset Additions		817,002		935,423		118,421						
Financing Activity		(36,058)		(280,490)		(244,432)						
Total Budget	\$	12,685,223	\$	13,992,714	\$	1,307,491						

Purpose and Scope

Compliance Assurance

NERC's Compliance Assurance group works collaboratively with the Regional Entities to ensure effective implementation of risk-based compliance monitoring under the Compliance Monitoring and Enforcement Program (CMEP) across the ERO Enterprise. This program ensures that Regional Entities monitor registered entities for compliance according to their own facts and circumstances, including the entity's inherent risks, evaluation of controls to mitigate inherent risks, and other factors, such as risk elements and entity performance. The risk-based compliance monitoring approach also allows for the appropriate allocation of resources to issues that pose a higher level of risk to the reliability of the bulk power system (BPS). More information on the Compliance Assurance program is available on the NERC website.

Organization Registration and Organization Certification

Organization Registration (Registration) identifies and registers BPS users, owners, and operators that are responsible for performing specified reliability functions to which requirements of mandatory Reliability Standards are applicable. Organization Certification (Certification) ensures that an applicant to be a Reliability Coordinator (RC), Balancing Authority (BA), or Transmission Operator (TOP) has the tools, processes, training, and procedures to demonstrate its ability to meet the requirements of all the Reliability Standards applicable to the functions for which it is applying, thereby demonstrating the ability to become certified and then operational. The decision to certify changes to an already operating and certified RC, BA, or TOP is a collaborative decision between the affected Regional Entities and NERC. More information on the Organization Registration and Certification program is available on the NERC website.

2023-2025 Areas of Focus

Key areas of focus for the Compliance Assurance, Registration, and Certification programs include:

- Develop and implement a plan to address facility ratings and demonstrate the importance of implementing strong internal controls
- Evaluate supply chain effectiveness and provide and analyze quarterly metrics on compliance data to inform emerging risks and Registration activities
- Enhance outreach to stakeholder/policy organizations and leverage the work of others
- Work to ensure successful roll-out of Align and the ERO Secure Evidence Locker (SEL); ensure meaningful oversight activities; and continue efforts to streamline risk-based CMEP activities

2023 Resource Requirements

The increase of 0.94 full-time equivalents (FTEs) from the 2022 budget to the 2023 budget is for increased critical infrastructure protection (CIP) audit support and expertise. The Contractors & Consultants budget includes an annual security standard certification for the ERO SEL, ¹² support for the Bulk Electric System (BES) notification and exception system tool, and process documentation support.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support primarily for Align and the ERO SEL, as well as a tool to manage Coordinated Functional Registration and Joint Registration Organizations. The Fixed Assets Additions budget includes expenditures for enhancements to Align, the ERO SEL, and the Centralized Registration ERO System (CORES). The Fixed Asset Additions budget also includes a share of costs for Organization Registration related to efforts to re-platform data management applications to create better integration of collection efforts and analysis for the ERO Enterprise.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the increase in FTEs explained above and merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Contractors & Consultants

The decrease in Contractors & Consultants expenses is due to the expected completion of Regional Entity CMEP audits by the end of 2022 (support was budgeted in 2022 and will no longer be needed in 2023).

Office Costs

The increase in Office Costs is primarily related to the software licenses and support expenses discussed in the Technology Requirements above.

Indirect Costs

Costs incurred for the Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase in Indirect Costs for Compliance Assurance and Registration and Certification is due to (1) the increase in FTEs discussed above and (2) the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the enhancements to Registration systems discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

¹² Any budgeted expenditures for Align or the ERO SEL are split evenly between the Compliance Assurance and Compliance Enforcement program area budgets.

				xed Asset Addi and 2023 Budg		15				
Compliance Assu		<u> </u>				Certification				
Complaince rose	2022 Budget		ido i	2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget 2022 Budget Over(Under)
Funding										
NERC Funding										
NERC Assessments Penalties Released	\$	12,673,290	\$	12,673,290	\$		\$	13,980,609	\$	1,307,319
Total NERC Funding	\$	12,673,290	\$	12,673,290	\$		\$	13,980,609	\$	1,307,319
•										
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-
Services & Software		-		-		-		-		-
Miscellaneous Interest & Investment Income		- 11,933		4,096		- (7,837)		- 12,105		- 172
Total Funding (A)	Ś	12,685,223	Ś	12.677.386	\$, , ,	\$	13,992,714	\$	1,307,491
	<u> </u>				Ť	(1,001)	Ť			_,007,.02
Expenses										
Personnel Expenses										
Salaries	\$	3,759,888	\$	3,874,821	\$	114,933	\$	4,179,061	\$	419,172
Payroll Taxes		224,943		215,730		(9,214)		245,841		20,897
Benefits		761,083		712,682		(48,401)		787,967		26,884
Retirement Costs		416,398		402,390		(14,008)		467,379		50,982
Total Personnel Expenses	\$	5,162,312	\$	5,205,622	\$	43,311	\$	5,680,248	\$	517,936
Meetings & Travel Expenses										
Meetings & Conference Calls	\$	82,000	¢	65,600	ć	(16,400)	ć	92,000	ć	10,000
Travel	Ų	251,000	ڔ	200,800	ڔ	(50,200)	ب	270,000	ب	19,000
Total Meetings & Travel Expenses	\$	333,000	\$	266,400	\$	(66,600)	\$	362,000	\$	29,000
Operating Expenses, excluding Depreciation		245.000	_	245.000				4.40.000		(204 200)
Contractors & Consultants	\$	345,000	\$	345,000	\$	-	\$	140,800	\$	(204,200)
Office Rent Office Costs		-		-		- 2.500		746 106		- 07 220
Professional Services		648,866		652,366		3,500		746,196		97,330
Miscellaneous		- 3,250		3,250		-		3,150		(100)
Total Operating Expenses, excluding Depreciation	\$	997,116	\$	1,000,616	\$	3,500	\$	890,146	\$	(106,970)
Total Direct Expenses	\$	6,492,428	\$	6,472,638	\$	(19,789)	\$	6,932,394	\$	439,966
Indirect Expenses	\$	5,384,352	\$	5,632,992	\$	248,640	\$	6,388,761	\$	1,004,409
Other Non-Operating Expenses	\$	27,500	\$	22,288	\$	(5,212)	\$	16,627	\$	(10,873)
Total Expenses (B)	\$	11,904,280	\$	12,127,918	\$	223,639	\$	13,337,782	\$	1,433,502
Change in Net Assets (=A-B)	\$	780,943	\$	549,467	\$	(231,476)	\$	654,933	\$	(126,011)
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	817,002	\$	844,295	\$	27,293	\$	935,423	\$	118,421
Financing Activity						4>				
Loan or Financing Lease - Borrowing (-)	\$	(318,287)	Ş	(326,355)	Ş	(8,068)	\$	(628,137)	\$	(309,850)
Loan or Financing Lease - Principal Payments (+)	<u>.</u>	282,228	ć	278,177	۲.	(4,051)	ć	347,646	ć	65,418
Net Financing Activity (D)	\$	(36,058)	ş	(48,178)	ş	(12,120)	ب	(280,490)	ې	(244,432)
Total Budget (=B+C+D)	\$	12,685,223	\$	12,924,035	\$	238,812	\$	13,992,714	\$	1,307,491
Change in Working Capital (=A-B-C-D)	\$	-	\$	(246,650)	\$	(246,650)	\$	-	\$	
FTEs		21.62		21.60		(0.02)		22.56		0.94

Compliance Enforcement

	Compliance Enforce	nt	
Compliance Enforcement	2022 Budget	2023 Budget	Increase (Decrease)
FTE Reporting	12.22	12.22	0.00
Direct Expenses	\$ 3,317,700	\$ 3,323,092	\$ 5,392
Indirect Expenses	3,043,329	3,460,579	417,249
Other Non-Operating Expenses	27,500	16,627	(10,873)
Fixed Asset Additions	564,827	532,573	(32,254)
Financing Activity	61,141	(57,075)	(118,216)
Total Budget	\$ 7,014,497	\$ 7,275,796	\$ 261,299

Purpose and Scope

The Compliance Enforcement program is responsible for overseeing enforcement processes, the application of penalties or sanctions, and activities to mitigate and prevent recurrence of noncompliance with Reliability Standards. The Compliance Enforcement group works collaboratively with the Regional Entities to ensure consistent and effective implementation of the risk-based Compliance Monitoring and Enforcement Program (CMEP). The group focuses on ensuring that the ERO Enterprise dedicates resources to the matters that pose the greatest risk to the reliability of the bulk power system (BPS). More information on the Compliance Enforcement program is available on the NERC website.

2023-2025 Areas of Focus

Key areas of focus for the Compliance Enforcement programs include:

- Continue efforts to align risk determinations and using a risk-based approach to processing noncompliance.
- Evaluate supply chain effectiveness and provide and analyze quarterly metrics on enforcement data to inform emerging risks
- Enhance outreach to stakeholder/policy organizations and leverage the work of others
- Work to ensure successful roll-out of Align and the ERO Secure Evidence Locker (SEL); ensure meaningful oversight activities; and continue efforts to streamline risk-based CMEP activities

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes the annual security standard certification for the ERO SEL¹³ and staff training facilitation.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support primarily for Align and the ERO SEL. The Fixed Assets Additions budget includes expenditures for enhancements to Align and the ERO SEL.

¹³

¹³ Any budgeted expenditures for Align or the ERO SEL are split evenly between the Compliance Assurance and Compliance Enforcement program area budgets.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Contractors & Consultants

The decrease in Contractors & Consultants expenses is due to the expected completion of Regional Entity CMEP audits by the end of 2022 (support was budgeted in 2022 and will no longer be needed in 2023).

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase in Indirect Costs for Compliance Enforcement is due to the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The decrease in Fixed Asset Additions is due to the allocation of fixed asset expenditures from the Administrative Programs.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

				xed Asset Addi		ns				
202		<u> </u>		and 2023 Budg	et					
	Compliance Enfe 2022 Budget		ntoi	2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)
Funding										
NERC Funding		7 007 750		7.007.750				7 250 220		264 407
NERC Assessments Penalties Released	\$	7,007,753	\$	7,007,753	\$	-	\$	7,269,239	\$	261,487
Total NERC Funding	\$	7,007,753	\$	7,007,753	\$	-	\$	7,269,239	\$	261.487
•			•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				, ,	•	
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-
Services & Software Miscellaneous		-		-		-		-		-
Interest & Investment Income		- 6,744		2,190		- (4,554)		- 6,557		(188)
Total Funding (A)	\$	7,014,497	\$	7,009,943	\$	(4,554)	\$	7,275,796	\$	261,299
Expenses										
Personnel Expenses Salaries	\$	1,838,076	Ļ	1,724,953	۲	(113,123)	۲.	1,950,093	۲.	112,017
Payroll Taxes	Ą	1,838,070	٦	1,724,933	Ş	(113,123)	Ş	1,930,093	Ş	3,303
Benefits		210,112		193,484		(16,628)		230,201		20,089
Retirement Costs		204,099		185,032		(19,067)		216,063		11,964
Total Personnel Expenses	\$	2,374,984	\$	2,211,170	\$	(163,814)	\$	2,522,357	\$	147,373
Meetings & Travel Expenses		7.000		F 600	,	(4, 400)	,	6.500		(500)
Meetings & Conference Calls Travel	\$	7,000 30,000	Þ	5,600 24,000	Þ	(1,400) (6,000)	Þ	6,500 54,000	Þ	(500) 24,000
Total Meetings & Travel Expenses	\$	37,000	\$	29,600	\$	(7,400)	\$	60,500	\$	23,500
Operating Expenses, excluding Depreciation Contractors & Consultants	\$	249,000	ć	249,000	ć		\$	69,000	ċ	(180,000)
Office Rent	Ą	249,000	۶	249,000	Ş	-	Ş	-	٦	(180,000)
Office Costs		639,816		639,816		-		654,435		14,619
Professional Services		15,000		15,000		-		15,000		-
Miscellaneous		1,900		1,900		-		1,800		(100)
Total Operating Expenses, excluding Depreciation	\$	905,716	\$	905,716	\$	-	\$	740,235	\$	(165,481)
Total Direct Expenses	\$	3,317,700	\$	3,146,486	\$	(171,214)	\$	3,323,092	\$	5,392
Indirect Expenses	\$	3,043,329	\$	3,012,086	\$	(31,243)	\$	3,460,579	\$	417,249
Other Non-Operating Expenses	\$	27,500	\$	22,288	\$	(5,210)	\$	16,627	\$	(10,873)
Total Expenses (B)	\$	6,388,529	\$	6,180,860	\$	(207,669)	\$	6,800,298	\$	411,769
Change in Net Assets (=A-B)	\$	625,968	\$	829,083	\$	203,115	\$	475,498	\$	(150,470)
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	564,827	\$	626,411	\$	61,584	\$	532,573	\$	(32,254)
Financing Activity	\$	(179,901)	¢	(174 500)	۲	E 202	ċ	(240 241)	¢	(160 240)
Loan or Financing Lease - Borrowing (-) Loan or Financing Lease - Principal Payments (+)	Ş	(179,901) 241,042	Ş	(174,509) 239,492	Ş	5,392 (1,550)	ڔ	(340,241) 283,166	Ş	(160,340) 42,124
Net Financing Activity (D)	\$	61,141	\$	64,983	\$	3,842	\$	(57,075)	\$	(118,216)
Total Budget (=B+C+D)	\$	7,014,497	Ś	6,872,254	Ś	(142,243)	Ś	7,275,796	Ś	261,299
Change in Working Capital (=A-B-C-D)	\$	-	\$	137,689		137,689		-	\$	-
FTEs		12.22		11.55	•	(0.67)	•	12.22		0.00
•						(5.5.)				2.20

Reliability Assessments and Performance Analysis

The Reliability Assessments and Performance Analysis (RAPA) program identifies, prioritizes, and enables activities to reduce known and emerging risks to the bulk power system (BPS). Four primary groups at NERC are focused on this program: (1) Reliability Assessments and Technical Committee; (2) Performance Analysis; (3) Advanced System Analytics and Modeling; and (4) BPS Security and Grid Transformation.

Reliability Assessments and Performance Analysis (in whole dollars)												
		Increase										
		2022 Budget		2023 Budget		(Decrease)						
FTE Reporting		26.32		29.14		2.82						
Direct Expenses	\$	7,486,899	\$	8,870,659	\$	1,383,760						
Indirect Expenses		6,554,863		8,252,149		1,697,286						
Other Non-Operating Expenses		-				-						
Fixed Asset Additions		1,153,089		1,661,328		508,239						
Financing Activity		(272,158)		(629,626)		(357,468)						
Total Budget	\$	14,922,693	\$	18,154,510	\$	3,231,817						

Purpose and Scope

Reliability Assessments and Technical Committee

The Reliability Assessments and Technical Committee group includes Reliability Assessment staff as well as the NERC staff secretaries of the Reliability and Security Technical Committee (RSTC). Reliability Assessment staff carry out the ERO's statutory responsibility to conduct assessments of the overall reliability and adequacy of BPS and associated emerging reliability risks that could impact the short, mid, and long-term planning horizons, as well as other reliability issues requiring in-depth analysis. Reliability Assessment activities directly address the risk priorities established by the Reliability Issues Steering Committee (RISC), and the group relies on its own engineering and analysis expertise as well as Regional Entity and stakeholder resources. The RSTC and its subgroups provide the oversight, guidance, and leadership essential to enhancing BPS reliability by addressing areas of strategic focus efficiently and comprehensively, and ensuring technical accuracy. More information on the Reliability Assessment program and the RSTC is available on the NERC website.

Performance Analysis

The Performance Analysis group monitors the performance of and identifies risks to BPS reliability through analyzing industry data and measuring historic trends. Analysis performed includes identifying potential risks related to system, equipment, entity, and organizational performance that may indicate a need to develop (1) improvements to reporting applications, and (2) new data collection or analysis tools, or to create, revise, or retire reporting areas. Performance Analysis staff leads the ERO, technical committee, and stakeholder process to publish the *State of Reliability* (SOR) report examining the year-over-year performance indicators of the grid. The program also develops the business requirements for all new reliability information data systems, specifically those required by NERC Rules of Procedure Section 1600 Data Requests. More information on the <u>Performance Analysis</u> program is available on the NERC website.

Advanced System Analytics and Modeling

Advanced System Analytics and Modeling (ASAM) staff provide technical leadership and support in the areas of resource and demand balancing and system analysis and modeling, including technical support for the NERC balancing (BAL) and modeling (MOD) Reliability Standards. ASAM staff also provide support

for the development and improvement of long-term, sustainable interconnection-based power flow, dynamic, and load models that exhibit the accuracy and fidelity necessary to reflect actual Bulk Electric System (BES) reliability performance and dynamic conditions. ASAM further provides advanced statistical analysis functions to support: (1) the SOR report and reliability assessments; (2) the Frequency Response Annual Analysis (FRAA) report to the Federal Energy Regulatory Commission (FERC); (3) analytical review of Reliability Standard effectiveness; and (4) various reports on an emergent basis.

BPS Security and Grid Transformation

The BPS Security and Grid Transformation department is responsible for driving key reliability and security initiatives working with internal and external stakeholders. Primary areas of focus include better integrating security concepts with conventional engineering activities as well as enabling new technologies in a reliable and secure manner. The group is responsible for key ERO work priorities, including inverter-based resource and distributed energy resource (DER) initiatives across the ERO Enterprise, and promoting concepts of cyber planning and grid transformation issues. The group coordinates a significant number of NERC's technical stakeholder groups under the RSTC, supports the standards development process on engineering and security-related topics, provides technical expertise across the ERO Enterprise, and coordinates with the Electricity Information Sharing and Analysis Center (E-ISAC) on cross-departmental topics related to security risks.

The groups described above work collaboratively with NERC stakeholders, particularly through the RSTC, to create a reliability strategy that is relevant, timely, and effective to address the most important reliability risks. Further, these groups work closely with other organizations to collaborate, coordinate, and leverage expertise, including but not limited to the Department of Energy (DOE), Electric Power Research Institute (EPRI), Institute of Electrical and Electronics Engineers (IEEE), Institute of Nuclear Power Operations (INPO), North American Transmission Forum (NATF), North American Generator Forum (NAGF), Carnegie Mellon Industry Center (CEIC), Power Systems Energy Research Center (PSERC), Interstate Natural Gas Association of America (INGAA), Natural Gas Supply Association (NGSA), Canadian Electricity Association (CEA), and International Council on Large Electric Systems (CIGRÉ).

2023-2025 Areas of Focus

Key areas of focus for RAPA include:

- Ensuring the reliable and secure integration of BPS-connected inverter-based resources and DER, including the analysis of grid disturbances, development of technical guidance and educational materials, and collaborating with industry to ensure the Reliability Standards adequately address emerging risks in this area
- Increasing understanding of changing resource mix impacts on BPS reliability by collecting plant, event, connected energy storage, and performance data for photovoltaic and wind generation, combined with enhanced design data and event reporting for conventional generation
- Enhancing reliability assessments to include assessments of energy availability and expanded probabilistic methods that can identify risks of energy shortfall for all assessment areas in longterm and seasonal time horizons
- Leveraging RAPA processes, tools, and products to improve BES resilience for wide-spread longterm extreme temperature events

2023 Resource Requirements

The increase of 2.82 full-time equivalents (FTEs) from the 2022 budget to the 2023 budget is related to increased support for probabilistic assessments and incorporation of cyber analysis into system planning and development of new cyber design techniques. The Contractors & Consultants budget includes support

for (1) related applications and databases; (2) analyses for energy risk and emerging technology; (3) the electromagnetic pulse (EMP) taskforce and geomagnetic disturbance (GMD) research; and (4) studies and expertise related to grid transformation and security integration.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support for various analytical tools and data collection and management systems, including the Generating Availability Data System (GADS), the Transmission Availability Data System (TADS), and Demand Response Availability Data System (DADS). The Fixed Assets Additions budget includes expenditures for enhancements to GADS, TADS, and the Reliability Assessment Data System (RADS), and development of data collection applications to include solar reporting as well as integrating energy storage with the solar and wind facilities. The Fixed Assets Additions budget also includes a share of costs related to efforts to re-platform data management applications to create better integration of collection efforts and analysis for the ERO Enterprise.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the increase in FTEs explained above and merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Contractors & Consultants

The increase for Contractors & Consultants expenses is due to additional support for studies and expertise for BPS Security and Grid Transformation activities.

Office Costs

The increase for Office Costs is primarily related to the software licenses and support expenses discussed in the Technology Requirements above, including support for new data collection systems and annual escalation for existing software agreements.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for the RAPA program is due to (1) the increase in FTEs discussed above and (2) the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the enhancements for RAPA database systems discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

Statement of Activities and Fixed Asset Additions

20	22 Bu	dget & Project	ion	and 2023 Budg	et					
Reliab	ility A	ssessments an	d Pe	erformance An	aly	sis				
						Variance				Variance
						2022 Projection				2023 Budget
		2022		2022		v 2022 Budget		2023		/ 2022 Budget
		Budget		Projection		Over(Under)		Budget		Over(Under)
Funding										
NERC Funding										
NERC Assessments	\$	14,848,167	\$	14,848,167	\$	-	\$	18,078,875	\$	3,230,708
Penalties Released		-		-		-	_	-		
Total NERC Funding	\$	14,848,167	\$	14,848,167	\$	-	\$	18,078,875	\$	3,230,708
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-
Services & Software		60,000		60,000		-		60,000		-
Miscellaneous		-		-		-		-		-
Interest & Investment Income		14,527		4,697		(9,830)		15,636		1,109
Total Funding (A)	\$	14,922,693	\$	14,912,864	\$	(9,829)	\$	18,154,510	\$	3,231,817
Expenses										
Personnel Expenses										
Salaries	\$	4,377,751	\$	4,314,335	\$	(63,416)	\$	5,162,514	\$	784,764
Payroll Taxes		272,752		258,715		(14,038)		307,570		34,818
Benefits		637,359		607,479		(29,880)		747,809		110,450
Retirement Costs		485,536		450,786		(34,750)		566,745		81,209
Total Personnel Expenses	\$	5,773,397	\$	5,631,314	\$	(142,083)	\$	6,784,638	\$	1,011,241
Meetings & Travel Expenses	_		_		_	(2.2.2.2)	_		_	
Meetings & Conference Calls	\$	180,000	\$	144,000	\$	(36,000)	Ş	219,750	\$	39,750
Travel	\$	207,000	_	165,600	<u>,</u>	(41,400)	,	244,400	_	37,400
Total Meetings & Travel Expenses	<u> </u>	387,000	\$	309,600	\$	(77,400)	Þ	464,150	\$	77,150
Operating Expenses, excluding Depreciation										
Contractors & Consultants	\$	681,227	\$	778,547	\$	97,320	\$	876,654	\$	195,427
Office Rent		-		-		-		-		-
Office Costs		640,675		644,675		4,000		740,217		99,542
Professional Services		-		-		-		-		-
Miscellaneous		4,600		4,600		-		5,000		400
Total Operating Expenses, excluding Depreciation	\$	1,326,502	\$	1,427,822	\$	101,320	\$	1,621,871	\$	295,369
Total Direct Expenses	\$	7,486,899	\$	7,368,736	\$	(118,162)	\$	8,870,659	\$	1,383,760
Indirect Expenses	\$	6,554,863	\$	6,459,686	\$	(95,177)	\$	8,252,149	\$	1,697,286
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenses (B)	\$	14,041,762	\$	13,828,422	\$	(213,340)	\$	17,122,809	\$	3,081,046
Change in Net Assets (=A-B)	\$	880,931		1,084,441		203,510		1,031,702		150,771
change in Net Assets (-A-b)		000,331	<u> </u>	1,004,441			7	1,031,702	_	150,771
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	1,153,089	\$	763,366	\$	(389,723)	\$	1,661,328	\$	508,239
Financing Activity										
Loan or Financing Lease - Borrowing (-)	\$	(387,479)	\$	(374,250)	\$	13,229	\$	(811,343)	\$	(423,864)
Loan or Financing Lease - Principal Payments (+)		115,321		95,345		(19,977)		181,717		66,396
Net Financing Activity (D)	\$	(272,158)	\$	(278,905)	\$	(6,747)	\$	(629,626)	\$	(357,468)
Total Budget (=B+C+D)	\$	14,922,693	\$	14,312,883	\$	(609,810)	\$	18,154,510	\$	3,231,817
Change in Working Capital (=A-B-C-D)	\$	-	\$	599,981	\$	599,981	\$	-	\$	
FTEs		26.32		24.77		(1.55)		29.14		2.82

Situation Awareness

	Situation Awarer		
	2022 Budget	2023 Budget	Increase (Decrease)
FTE Reporting	7.52	7.52	0.00
Direct Expenses	\$ 3,022,490	\$ 3,229,002	\$ 206,512
Indirect Expenses	1,872,818	2,129,587	256,769
Other Non-Operating Expenses	-	-	-
Fixed Asset Additions	301,240	814,891	513,651
Financing Activity	(77,759)	(162,484)	(84,725)
Total Budget	\$ 5,118,788	\$ 6,010,996	\$ 892,208

Purpose and Scope

NERC and the Regional Entities monitor bulk power system (BPS) conditions, significant occurrences, emerging risks, and threats across the 17 Reliability Coordinator regions in North America to maintain an understanding of conditions and situations that could impact reliable operation. NERC's BPS Awareness (BPSA) group also supports the development and publication of NERC Alerts and awareness products and facilitates information sharing among industry, the Regional Entities, and the government during crisis situations and major system disturbances. The process for understanding the potential threats or vulnerabilities to BPS reliability starts with understanding occurrences and events in the context in which they occur, and registered entities robustly share information and collaborate with the ERO to maintain and improve overall reliability. More information on the BPSA program is available on the NERC website.

2023-2025 Areas of Focus

Key areas of focus for BPSA include:

- Enhancing situation awareness tools to increase agility and efficiency, as well as visibility and understanding of the reliability or availability of natural gas and its interdependency with electrical generation
- Collaborating across the ERO Enterprise and with stakeholders to mitigate emerging and known
 risk by using all available tools, including the NERC Alerts process to issue Advisory (Level 1) Alerts
 on significant and emerging reliability and security-related topics as needed, and to facilitate the
 tracking of actions specified in Recommendation (Level 2) and Essential Action (Level 3) Alerts
- Continue engaging with industry, the Electricity Information Sharing and Analysis Center (E-ISAC), government partners, and the ERO Enterprise on emerging risks to BPS reliability
- Engaging situation awareness subject-matter experts in support of the work of Reliability Standards, the E-ISAC, and the Reliability and Security Technical Committee (RSTC) to advance the security posture of the industry

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes support for a data historian application.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support for various BPSA systems and tools related to wide-area view situation awareness, conditions monitoring, resource adequacy, inadvertent interchange, frequency monitoring, Reliability Coordinator information sharing, alerting, and data collection and analysis. The Fixed Assets Additions budget includes expenditures for replacements of Situation Awareness systems that are nearing end-of-life.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the merit and market adjustments discussed in the *Introduction* and *Executive Summary*.

Office Costs

The increase for Office Costs is primarily related to the software licenses and support expenses discussed in the Technology Requirements above, including support for new systems and annual escalation for existing software agreements.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for the BPSA program is due to the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the replacement of systems discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

				xed Asset Addi		ıs				
202	2 Buc	Situation A		and 2023 Budg eness	eτ					
	2022 Budget		war	2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget	١	Variance 2023 Budget v 2022 Budget Over(Under)
Funding										
NERC Funding										
NERC Assessments	\$	5,114,638	\$	5,114,638	\$	- :	\$	6,006,961	\$	892,323
Penalties Released			_		_	-		-		
Total NERC Funding	\$	5,114,638	\$	5,114,638	\$	-	\$	6,006,961	\$	892,323
Third-Party Funding	\$	_	\$	_	\$	- :	\$	_	\$	_
Testing, Renewal, & Continuing Ed Fees	Ψ.	-	Ψ.	_	~	-	Ψ	-	Ψ.	_
Services & Software		-		-		-		-		_
Miscellaneous		-		-		-		-		-
Interest & Investment Income		4,150		1,468		(2,683)		4,035		(115)
Total Funding (A)	\$	5,118,788	\$	5,116,106	\$	(2,683)	\$	6,010,996	\$	892,208
Expenses Personnel Expenses										
Salaries	\$	1,227,161	Ś	1,260,568	Ś	33,407	\$	1,282,278	\$	55,117
Payroll Taxes	7	76,087	Y	80,209	Y	4,122	Υ	77,182	7	1,095
Benefits		258,757		255,940		(2,817)		271,648		12,891
Retirement Costs		134,973		136,423		1,450		139,292		4,320
Total Personnel Expenses	\$	1,696,978	\$	1,733,140	\$	36,162	\$	1,770,400	\$	73,422
Meetings & Travel Expenses		70.000		60.000		(2.000)		70.000		
Meetings & Conference Calls Travel	\$	70,000 22,000	\$	68,000 17,600	\$	(2,000) (4,400)	\$	70,000 16,000	\$	(6,000)
Total Meetings & Travel Expenses	\$	92,000	\$	85,600	\$	(6,400)	\$	86,000	\$	(6,000)
Operating Expenses, excluding Depreciation Contractors & Consultants Office Rent	\$	15,000	\$	15,000	\$	- :	\$	23,000	\$	8,000
Office Costs		1,217,412		1,218,412		1,000		1,348,302		130,890
Professional Services		-		-		-		-		-
Miscellaneous		1,100		1,100		-		1,300		200
Total Operating Expenses, excluding Depreciation	\$	1,233,512	\$	1,234,512	\$	1,000	\$	1,372,602	\$	139,090
Total Direct Expenses	\$	3,022,490	\$	3,053,252	\$	30,762	\$	3,229,002	\$	206,512
Indirect Expenses	\$	1,872,818	\$	2,018,489	\$	145,671	\$	2,129,587	\$	256,769
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenses (B)	\$	4,895,308	\$	5,071,741	\$	176,433	\$	5,358,589	\$	463,281
Change in Net Assets (=A-B)	\$	223,480	\$	44,365	\$	(179,115)	\$	652,407	\$	428,927
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	301,240	\$	267,601	\$	(33,639)	\$	814,891	\$	513,651
Financing Activity										
Loan or Financing Lease - Borrowing (-)	\$	(110,708)	\$	(116,944)	\$	(6,236)	\$	(209,379)	\$	(98,671)
Loan or Financing Lease - Principal Payments (+)		32,949		29,793		(3,156)		46,895		13,946
Net Financing Activity (D)	\$	(77,759)	\$	(87,151)	\$	(9,392)	\$	(162,484)	\$	(84,725)
Total Budget (=B+C+D)	\$	5,118,788	\$	5,252,190	\$	133,402	\$	6,010,996	\$	892,208
Change in Working Capital (=A-B-C-D)	\$	-	\$	(136,085)	\$	(136,085)	\$	-	\$	-
FTEs		7.52		7.74		0.22		7.52		0.00

Event Analysis

	Event Analysis		
COR - Scool English	2022 Budget	2023 Budget	Increase (Decrease)
FTE Reporting	6.58	6.58	0.00
Direct Expenses	\$ 2,018,854	\$ 2,130,315	\$ 111,461
Indirect Expenses	1,638,716	1,863,389	224,673
Other Non-Operating Expenses	-	-	-
Fixed Asset Additions	229,522	255,905	26,382
Financing Activity	(68,040)	(142,174)	(74,134)
Total Budget	\$ 3,819,053	\$ 4,107,435	\$ 288,382

Purpose and Scope

The Event Analysis program informs assessments of the reliability and adequacy of the Bulk Electric System (BES) through analysis of real-time operating events on the system. This includes identifying potential issues of concern related to system, equipment, entity, human error, and organizational performance that may indicate a need to (1) develop remediation and/or risk reduction strategies and action plans, (2) revise, retire, or consider new Reliability Standards, and (3) shape aggregate reliability assurance planning. The Event Analysis group analyzes reportable events to identify and understand lessons learned, sequence of events, root and contributing causes, risks to reliability, and potential mitigating actions. The group keeps the industry well informed of system events, emerging trends, event precursors, risk analysis, lessons learned, and recommended corrective and expected mitigation activities through various verbal and written communications/reports and cross-functional collaboration efforts. More information on the Event Analysis program is available on the NERC website.

2023-2025 Areas of Focus

Key areas of focus for Event Analysis include:

- Enhancing event processing in support of developing a coherent system performance picture within the Rules of Procedure Section 800 system performance monitoring and reporting program
- Enhancing program data collection, organization, and manipulation capabilities
- Tuning alignment activities of cross-functional project collaboration through data analysis and disturbance reporting flexibility and agility
- Reinforcing fundamental practices and advocacy of enhanced reliability practices through joint reliability partnership activities with stakeholders and the ERO Enterprise

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes support for The Event Analysis Management System (TEAMS), human performance activities, and potential augmentation for event analysis review.

2023 Technology Requirements

The Fixed Assets Additions budget includes expenditures for TEAMS enhancements and a share of costs related to efforts to re-platform data management applications to create better integration of collection efforts and analysis for the ERO Enterprise.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the merit and market adjustments discussed in the *Introduction* and *Executive Summary*.

Contractors & Consultants

The increase in Contractors & Consultants expenses is due to additional support for human performance activities.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for the Event Analysis program is due to the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the enhancements for TEAMS and database platforms discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

				xed Asset Addi		ns				
202	22 Bud	get & Project Event A		and 2023 Budg	et					
	2022 Budget		naly	2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)
Funding										
NERC Funding										
NERC Assessments Penalties Released	\$	3,815,421 -	\$	3,815,421 -	\$	-	\$	4,103,904 -	\$	288,483
Total NERC Funding	\$	3,815,421	\$	3,815,421	\$	-	\$	4,103,904	\$	288,483
TI: 10 5 . !!										
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-
Services & Software Miscellaneous		-		-		-		-		-
Interest & Investment Income		3,632		1,286		(2,346)		3,531		(101)
Total Funding (A)	\$	3,819,053	\$	3,816,707	\$	(2,346)	\$	4,107,435	\$	288,382
Expenses										
Personnel Expenses										
Salaries	\$	1,297,758	\$	1,311,270	\$	13,512	\$	1,336,089	\$	38,331
Payroll Taxes		73,630		77,975		4,345		72,312		(1,317)
Benefits		205,684		190,721		(14,963)		193,518		(12,167)
Retirement Costs		145,524		141,706		(3,818)		144,644		(880)
Total Personnel Expenses	\$	1,722,596	\$	1,721,672	\$	(924)	\$	1,746,563	\$	23,967
Maratina O Turnel Survey										
Meetings & Travel Expenses		25.000	,	20.000	,	(45.000)	,	25.000	,	(40,000)
Meetings & Conference Calls Travel	\$	35,000 91,000	\$	20,000 72,800	\$	(15,000) (18,200)	>	25,000 91,000	\$	(10,000)
Total Meetings & Travel Expenses	\$	126,000	\$		\$	(33,200)	\$	116,000	\$	(10,000)
Operating Expenses, excluding Depreciation										
Contractors & Consultants	\$	118,158	\$	118,158	\$	-	\$	220,802	\$	102,644
Office Rent		-		-		-		-		-
Office Costs		50,500		50,500		-		45,750		(4,750)
Professional Services		-		-		-		-		-
Miscellaneous	_	1,600	_	1,600	_	-	_	1,200	_	(400)
Total Operating Expenses, excluding Depreciation	\$	170,258	\$	170,258	\$	-	\$	267,752	\$	97,494
Total Direct Expenses	\$	2,018,854	\$	1,984,730	\$	(34,124)	\$	2,130,315	\$	111,461
Indirect Expenses	\$	1,638,716	\$	1,768,134	\$	129,418	\$	1,863,389	\$	224,673
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenses (B)	\$	3,657,570	\$	3,752,863	\$	95,294	\$	3,993,704	\$	336,134
Change in Net Assets (=A-B)	\$	161,483	\$	63,843	\$	(97,640)	\$	113,731	\$	(47,752)
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	229,522	\$	200,244	\$	(29,278)	\$	255,905	\$	26,382
Financing Activity								4		
Loan or Financing Lease - Borrowing (-)	\$	(96,870)	Ş	(102,439)	\$	(5,569)	Ş	(183,207)	\$	(86,337)
Loan or Financing Lease - Principal Payments (+)	_	28,830	_	26,098	_	(2,733)	,	41,033	,	12,203
Net Financing Activity (D)	\$	(68,040)	Ş	(76,341)	Ş	(8,302)	>	(142,174)	Ş	(74,134)
Total Budget (=B+C+D)	\$	3,819,053	\$	3,876,766	\$	57,713	\$	4,107,435	\$	288,382
Change in Working Capital (=A-B-C-D)	\$	-	\$	(60,059)	\$	(60,059)	\$	-	\$	-
FTEs		6.58		6.78		0.20		6.58		0.00

Electricity Information Sharing and Analysis Center

	E-ISAC (including C	?)	
	2022 Budget	2022 Budget	Increase
	2022 Budget	2023 Budget	(Decrease)
FTE Reporting	43.95	45.87	1.93
Direct Expenses	\$ 21,134,114	\$ 24,658,079	\$ 3,523,964
Indirect Expenses	10,944,281	12,990,480	2,046,200
Other Non-Operating Expenses	-	•	-
Fixed Asset Additions	1,223,416	1,368,735	145,319
Financing Activity	(454,407)	(991,153)	(536,746)
Total Budget	\$ 32,847,405	\$ 38,026,141	\$ 5,178,736

Purpose and Scope

The Electricity Information Sharing and Analysis Center (E-ISAC) provides its members and partners with resources to prepare for and reduce cyber and physical security threats to the North American electricity industry. The E-ISAC offers products and services that give timely, relevant, and actionable situational awareness and analysis to asset owners and operators as well as cross-sector and government partners. In 2017, the E-ISAC developed a long-term strategic plan to better define its mission and focus its resources. The central underpinning of the plan is for the E-ISAC to focus on providing timely and actionable information to industry regarding cyber and physical security threats and mitigation strategies. The strategic plan also recognizes the critical interdependencies between the E-ISAC, industry, U.S. and Canadian government agencies, and other stakeholders. In 2020, the strategic plan was validated in terms of the primary focus areas. More information on E-ISAC is available on the NERC website.

The E-ISAC also oversees the Cybersecurity Risk Information Sharing Program (CRISP), a unique public-private initiative among the E-ISAC, the North American electric utility industry, the Department of Energy (DOE), and the U.S. Intelligence Community that delivers real-time, relevant, and actionable cyber security risk information to all E-ISAC member electricity asset owners and operators, including those from Canada and Mexico. Using passive information sharing devices (ISDs) on participant networks outside boundary firewalls, participant data is collected and then matched against known threat signatures—classified and unclassified—to identify potential threats and provide participants with recommended mitigation steps. The Pacific Northwest National Laboratory (PNNL), is the primary subcontractor to NERC for the deployment of the required technology, supporting infrastructure, analysis, and technical capabilities for CRISP. PNNL is a U.S. DOE National Laboratory, operated by Battelle with oversight by the DOE.

E-ISAC and CRISP Funding and Indirect Cost Allocation Structure

Of the total 2023 E-ISAC budget, including CRISP, approximately 74% is funded by assessments and 25% is funded by CRISP participants for CRISP costs. Just under 1% of the budget is funded by "other funding." This includes interest income (\$23k), funding from the Downstream Natural Gas ISAC (\$60k), ¹⁴ and anticipated revenue from a new Vendor Affiliate Program (\$200k). The Vendor Affiliate Program is launching in 2022 with incremental implementation over three years. With the increasing complexities and risk in reliance on supply chain software components, this fee-for-service program provides opportunities for collaboration and information sharing between the E-ISAC and the vendor

¹⁴ The funding from the Downstream Natural Gas ISAC equates to approximately half of a full-time equivalent (FTE), which covers the services the E-ISAC provides to the natural gas sector. Expenditures in this area are carefully monitored and fees will be adjusted as required.

community. Participating vendors collaborate with electricity sector stakeholders in a trusted environment, providing timely and actionable information, helping to maintain situational awareness as events unfold, and offering post-event analysis and subject matter expertise on an ongoing basis. Sales and business development activities are strictly prohibited.

The E-ISAC and CRISP budgets are allocated indirect costs (i.e., the budgets of the Administrative Programs, or overhead) in the same manner as all other NERC statutory programs, which is based on the ratio of a statutory department's FTEs to total budgeted statutory FTEs. There are no specific indirect costs that E-ISAC or CRISP incur that other statutory departments do not.

The CRISP budget specifically includes two major categories of expense: (1) costs funded fully by CRISP participants, which include the contract with PNNL, an annual security review, and any programs agreed to be funded exclusively by CRISP participants; and (2) operational and administrative program costs, which are funded 50% by participants and 50% by NERC assessments. These operational and administrative expenses include dedicated personnel for CRISP program management and administration, as well as time allocated from E-ISAC staff for data analysis. The total costs paid by participants, which make up just over 80% of the CRISP budget (the majority of which is for the PNNL contract), are shown on the "Third-Party Funding" line of the "CRISP Only" Statement of Activities and Fixed Asset Additions report below. Funding for the remaining 50% of CRISP operational and administrative costs (less additional funding from interest and investment income) is shown on the "NERC Assessments" line. While the entire electricity sector benefits from CRISP, not just CRISP participants, appropriate levels of assessment-based funding and overhead allocation to the CRISP program will be re-evaluated for the 2024 BP&B cycle.

2023-2025 Areas of Focus

Key areas of focus for E-ISAC include:

- Reviewing and curating intelligence applicable to the electricity sector
- Conducting threat hunts for malicious software on Information Technology (IT) and Operational Technology (OT) sensor platforms
- Expanding CRISP participation and technology modernization
- Expanding membership and strategic relationships, including further collaboration with the natural gas sector, enhanced membership engagement, and establishing the vendor affiliate program

2023 Resource Requirements

The increase of 1.93 FTEs from the 2022 budget to the 2023 budget is for increased analytical capabilities and leveraging of threat intelligence, support for key industry priorities, including OT and natural gas partnerships, and CRISP enhancement and expansion. The Contractors & Consultants budget includes expenses for security consulting, technology support, strategic partnerships, GridEx support, and Watch Officer contractors. This budget also includes the CRISP contract with PNNL, annual security review, and OT program support; these expenses make up \$7.0M of the total Contractors & Consultants budget and are funded fully by CRISP participants.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support for data analysis and cyber and intelligence tools, GridEx activities, critical broadcast capability, customer relationship management (CRM) technology, the E-ISAC Portal, and various software needs to support CRISP. The Fixed Asset Additions budget also includes expenditures for enhancements to the E-ISAC Portal and the implementation of automated information sharing.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the increase in FTEs explained above and merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Contractors & Consultants

The increase in Contractors & Consultants expenses is primarily related to the CRISP contract with PNNL, which includes increased operational and insurance costs, additional security consulting, and support for the GridEx VII event in 2023.

Office Costs

The increase in Office Costs is primarily related to annual escalation assumptions for software licenses and support expenses discussed in the Technology Requirements above.

Professional Services

The increase in Professional Services is due to market pressures for liability insurance required for CRISP.

Indirect Costs

As discussed above, costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for Indirect Costs in E-ISAC is due to (1) the increase in FTEs discussed above and (2) the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the system enhancements and technology initiatives discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

Statement of Activities and Fixed Asset Additions

				and 2023 Budg		113						
E-ISAC (including CRISP)												
		2022 Budget		2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)		
Funding												
NERC Funding												
NERC Assessments	\$	25,135,900	Ş	25,135,900	\$	-	\$	28,174,435	\$	3,038,535		
Penalties Released	\$	25,135,900	\$	25,135,900	\$		\$	28,174,435	\$	2 020 525		
Total NERC Funding	<u> </u>	25,135,900	Þ	25,135,900	Ş	-	Þ	28,174,435	Þ	3,038,535		
Third-Party Funding	\$	7,928,423	\$	8,538,106	\$	609,683	\$	9,569,170	Ś	1,640,747		
Testing, Renewal, & Continuing Ed Fees		-		-	Ċ	-		-		-		
Services & Software		-		-		-		-		-		
Miscellaneous		60,000		60,000		-		260,000		200,000		
Interest & Investment Income		23,082		10,224		(12,858)		22,537		(545)		
Total Funding (A)	\$	33,147,405	\$	33,744,230	\$	596,826	\$	38,026,141	\$	4,878,736		
Expenses												
Personnel Expenses												
Salaries	\$	8,011,321	\$	7,785,014	\$	(226,306)	\$	8,634,606	\$	623,285		
Payroll Taxes		480,111		475,076		(5,035)		503,699		23,588		
Benefits		1,069,032		1,035,261		(33,771)		1,168,786		99,754		
Retirement Costs		869,944		822,882		(47,063)		930,186		60,242		
Total Personnel Expenses	\$	10,430,408	\$	10,118,233	\$	(312,175)	\$	11,237,278	\$	806,869		
Machines & Turnel Functions												
Meetings & Travel Expenses	\$	102,000	ć	91,600	4	(10,400)	Ļ	140,000	Ļ	38,000		
Meetings & Conference Calls Travel	Þ	222,000	Ş	177,600	Ş	(44,400)	Ş	246,000	Ş	24,000		
Total Meetings & Travel Expenses	\$	324,000	\$	269,200	\$	(54,800)	Ś	386,000	\$	62,000		
	<u> </u>	0,000	<u> </u>			(0.,000)	Ť	000,000	·	0_,000		
Operating Expenses, excluding Depreciation												
Contractors & Consultants	\$	8,325,861	\$	9,118,706	\$	792,845	\$	10,172,855	\$	1,846,994		
Office Rent		-		-		-		-		-		
Office Costs		1,854,095		1,895,595		41,500		2,002,096		148,001		
Professional Services		190,000		515,037		325,037		850,000		660,000		
Miscellaneous		9,750		9,750		-		9,850		100		
Total Operating Expenses, excluding Depreciation	\$	10,379,706	\$	11,539,088	\$	1,159,382	\$	13,034,801	\$	2,655,095		
Total Direct Expenses	\$	21,134,114	\$	21,926,521	\$	792,407	\$	24,658,079	\$	3,523,964		
Indirect Expenses	Ś	10,944,281	\$	11,041,708	\$	97,427	\$	12,990,480	\$	2,046,200		
mairect expenses	<u> </u>	10,944,261	Ą	11,041,706	Ş	97,427	ş	12,990,460	ş	2,040,200		
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-		
Total Expenses (B)	\$	32,078,395	\$	32,968,229	\$	889,834	\$	37,648,559	\$	5,570,164		
Change in Net Assets (=A-B)	\$	1,069,009	\$	776,001	\$	(293,009)	\$	377,582	\$	(691,428)		
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	1,223,416	\$	967,051	\$	(256,365)	\$	1,368,735	\$	145,319		
Financing Activity												
Loan or Financing Lease - Borrowing (-)	\$	(646,952)	¢	(639,715)	¢	7,237	\$	(1,277,212)	¢	(630,259)		
Loan or Financing Lease - Borrowing (-) Loan or Financing Lease - Principal Payments (+)	۲	192,545	ڔ	162,975	ڔ	(29,570)	ب	286,058	ڔ	93,513		
Net Financing Activity (D)	\$	(454,407)	\$	(476,740)	Ś	(22,333)	\$	(991,153)	\$	(536,746)		
Total Budget (=B+C+D)	\$	32,847,405	\$	33,458,540	\$	611,136	\$	38,026,141	\$	5,178,736		
Change in Working Capital (=A-B-C-D)	\$	300,000	\$	285,690	\$	(14,310)	\$	-	\$	(300,000)		
FTEs		43.95		42.34		(1.61)		45.87		1.93		

				ixed Asset Add		ns			
202	22 Bu	<u> </u>		and 2023 Budg	et				
		E-ISAC	On	ly		Variance			Maniana
						Variance 2022 Projection			Variance 2023 Buddget
		2022		2022		v 2022 Budget	2023		/ 2022 Budget
		Budget		Projection		Over(Under)	Budget		Over(Under)
		· ·		•			ū		, ,
Funding									
NERC Funding									
NERC Assessments	\$	23,779,997	\$	23,779,997	\$	- 9	25,836,864	\$	2,056,867
Penalties Released		-		-		-	-		-
Total NERC Funding	\$	23,779,997	\$	23,779,997	\$	- ;	\$ 25,836,864	\$	2,056,867
Third Darks Funding	\$		\$,		4	۲.	
Third-Party Funding Testing, Renewal, & Continuing Ed Fees	Þ	-	Ş	-	\$	- 9	-	\$	-
Services & Software		_		-		-	-		-
Miscellaneous		60,000		60,000		_	260,000		200,000
Interest & Investment Income		22,082		7,224		(14,858)	21,537		(545)
Total Funding (A)	\$	23,862,079	\$	23,847,221	\$	(14,857)		\$	2,256,322
	÷			-,- ,		, , ,	, ., .	<u> </u>	,,-
Expenses									
Personnel Expenses									
Salaries	\$	7,160,834	\$	6,956,183	\$	(204,651)	7,593,979	\$	433,144
Payroll Taxes		439,258		435,016		(4,242)	442,675		3,417
Benefits		933,864		907,003		(26,861)	979,020		45,156
Retirement Costs		800,898		758,140		(42,757)	820,843		19,945
Total Personnel Expenses	\$	9,334,855	\$	9,056,343	\$	(278,512)	\$ 9,836,516	\$	501,661
Meetings & Travel Expenses									
Meetings & Conference Calls	\$	90,000	\$	82,000	\$	(8,000)	95,000	\$	5,000
Travel	Y	200,000	Y	160,000	7	(40,000)	210,000	Y	10,000
Total Meetings & Travel Expenses	\$	290,000	\$	242,000	\$		•	\$	15,000
Operating Expenses, excluding Depreciation	_				_			_	
Contractors & Consultants	\$	2,171,041	\$	2,171,041	\$	- 5	2,827,834	\$	656,793
Office Rent		-		-		-	-		-
Office Costs		1,384,704		1,414,704		30,000	1,454,296		69,592
Professional Services Miscellaneous		9,200		9,200		-	9,200		-
Total Operating Expenses, excluding Depreciation	\$	3,564,945	\$	3,594,945	\$	30,000	\$ 4,291,330	\$	726,385
									-
Total Direct Expenses	\$	13,189,800	\$	12,893,288	\$	(296,512)	\$ 14,432,846	\$	1,243,046
Indirect Expenses	\$	9,963,978	\$	9,935,972	\$	(28,005)	\$ 11,366,670	\$	1,402,693
Other Non-Operating Expenses	\$	-	\$	-	\$	- ;	\$ -	\$	-
Total Expenses (B)	\$	23,153,777	\$	22,829,261	\$	(324,517)	\$ 25,799,517	\$	2,645,739
Change in Net Assets (=A-B)	\$	708,301	\$	1,017,960	\$	309,659	\$ 318,884	\$	(389,417)
	=	4 400 000	_	272.247	_	(242.550)	4 400440	_	64.40=
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	1,122,006	Ş	879,347	Ş	(242,659)	\$ 1,186,143	Ş	64,137
Financing Activity									
Loan or Financing Lease - Borrowing (-)	\$	(589,003)	\$	(575,653)	\$	13,350	(1,117,560)	\$	(528,557)
Loan or Financing Lease - Principal Payments (+)		175,299		146,654		(28,644)	250,301		75,002
Net Financing Activity (D)	\$	(413,705)	\$	(428,999)	\$	(15,294)	\$ (867,259)	\$	(453,554)
Total Budget (=B+C+D)	\$	23,862,079	\$	23,279,609	\$	(582,469)	\$ 26,118,401	\$	2,256,322
Change in Working Capital (=A-B-C-D)	\$		\$	567,612	\$	567,612	\$ <u>-</u>	\$	-
FTEs		40.01		38.10		(1.91)	40.14		0.13
				55.26		(=:==)			5.25

Statement of Activities and Fixed Asset Additions

				and 2023 Budg		10				
		CRISP								
		2022 Budget		2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)
Funding										
NERC Funding										
NERC Assessments	\$	1,355,903	\$	1,355,903	\$	-	\$	2,337,571	\$	981,668
Penalties Released	_	-	_	-	_	-	_		_	
Total NERC Funding	\$	1,355,903	\$	1,355,903	\$	-	\$	2,337,571	\$	981,668
Third-Party Funding	\$	7,928,423	\$	8,538,106	\$	609,683	\$	9,569,170	Ś	1,640,747
Testing, Renewal, & Continuing Ed Fees	·	-		-	ľ	-		-	Ċ	-
Services & Software		-		-		-		-		-
Miscellaneous		-		-		-		-		-
Interest & Investment Income		1,000		3,000		2,000		1,000		-
Total Funding (A)	\$	9,285,326	\$	9,897,009	\$	611,683	\$	11,907,740	\$	2,622,414
Expenses										
Personnel Expenses										
Salaries	\$	850,486	\$	828,831	\$	(21,655)	\$	1,040,627	\$	190,141
Payroll Taxes		40,853		40,060		(793)		61,024		20,171
Benefits		135,168		128,258		(6,910)		189,766		54,598
Retirement Costs		69,046		64,741		(4,305)		109,344		40,297
Total Personnel Expenses	\$	1,095,553	\$	1,061,890	\$	(33,663)	\$	1,400,761	\$	305,208
Mostings & Traval Europeas										
Meetings & Travel Expenses Meetings & Conference Calls	\$	12,000	ė	9,600	ć	(2,400)	ċ	45,000	ć	33,000
Travel	Ą	22,000	ڔ	17,600	ڔ	(4,400)	Ą	36,000	ڔ	14,000
Total Meetings & Travel Expenses	\$	34,000	\$	27,200	\$	(6,800)	Ś	81,000	\$	47,000
Total Moonings of March Expenses	<u> </u>	0.,000		=:,===		(0,000)	Ť	02,000	<u> </u>	.,,,,,,,
Operating Expenses, excluding Depreciation										
Contractors & Consultants	\$	6,154,820	\$	6,947,665	\$	792,845	\$	7,345,021	\$	1,190,201
Office Rent		-		-		-		-		-
Office Costs		469,391		480,891		11,500		547,800		78,409
Professional Services		190,000		515,037		325,037		850,000		660,000
Miscellaneous		550		550		-		650		100
Total Operating Expenses, excluding Depreciation	\$	6,814,761	\$	7,944,143	\$	1,129,382	\$	8,743,471	\$	1,928,710
Total Direct Expenses	\$	7,944,314	\$	9,033,233	\$	1,088,919	\$	10,225,232	\$	2,280,918
Indirect Evenence	Ś	980.303	\$	1,105,736	\$	125.432	\$	1,623,810	\$	643,507
Indirect Expenses	<u> </u>	980,303	Þ	1,105,736	Þ	125,432	Þ	1,623,810	Þ	643,507
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenses (B)	\$	8,924,618	\$	10,138,969	\$	1,214,351	\$	11,849,042	\$	2,924,425
Change in Net Assets (=A-B)	\$	360,708	\$	(241,960)	\$	(602,668)	\$	58,698	\$	(302,011)
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	101,411	\$	87,704	\$	(13,707)	\$	182,592	\$	81,181
Financing Activity										
Financing Activity	ć	/E7.040\	۲	164.0631	۲.	IC 112\	Ļ	/1E0 CE4\	خ	(101 702)
Loan or Financing Lease - Borrowing (-)	\$	(57,949) 17,247	Þ	(64,062) 16,321	Þ	(6,113)	Ş	(159,651) 35,757	Þ	(101,703)
Loan or Financing Lease - Principal Payments (+) Net Financing Activity (D)	\$	17,247	ć	16,321 (47,741)	ć	(926) (7.039)	ć	35,757	ć	18,511
Net Financing Activity (D)	<u> </u>	(40,702)	ş	(47,741)	ş	(7,039)	Ą	(123,894)	Ģ	(83,192)
Total Budget (=B+C+D)	\$	8,985,326	\$	10,178,931	\$	1,193,605	\$	11,907,740	\$	2,922,414
Change in Working Capital (=A-B-C-D)	\$	300,000	\$	(281,922)	Ś	(581,922)	\$	_	\$	(300,000)
FTEs		3.94	ŕ	4.24	- T	0.30	•	5.73		1.80
I I LJ		3.54		4.24		0.30		5.75		1.00

Personnel Certification and Credential Maintenance

Personn	el Ce	rtification and Cred	ial Maintenance	
		2022 D. J. J.	2022 D. J.	Increase
		2022 Budget	2023 Budget	(Decrease)
FTE Reporting		2.82	2.82	-
Direct Expenses	\$	1,097,635	\$ 1,108,890	\$ 11,255
Indirect Expenses		702,307	798,595	96,288
Other Non-Operating Expenses		-	-	-
Fixed Asset Additions		72,652	115,209	42,557
Financing Activity		(29,160)	(60,932)	(31,772)
Total Budget	\$	1,843,435	\$ 1,961,763	\$ 118,328

Purpose and Scope

The Personnel Certification and Credential Maintenance group oversees the System Operator Certification and Credential Maintenance programs that promote reliability of the North American bulk power system (BPS) by ensuring that system operators maintain their required credentials to work in system control centers across North America. NERC's system operator certification exam tests specific knowledge of job skills and Reliability Standards and also prepares operators to handle the BPS during normal and emergency operations. Certification is maintained by completing NERC-approved Credential Maintenance Program courses and activities.

The Personnel Certification Governance Committee (PCGC) is a NERC standing committee that provides oversight to implement and maintain the integrity and independence of the NERC System Operator Certification Program. The Credential Maintenance Working Group (CMWG) reports to the PCGC and is responsible for developing and maintaining the Credential Maintenance Program under the general guidelines set by the PCGC. The PCGC's Exam Working Group (EWG), which consists of subject matter experts from all regions of North America, is responsible for doing an extensive job analysis survey of certified operators across the industry, which provides the basis for the exams. NERC contracts with psychometric consultants who assist a working group of certified system operators in the development and maintenance of each exam.

The System Operator Certification and Credential Maintenance programs are completely self-funded through exam and continuing education provider fees, and the PCGC oversees the programs' budgets. More information on the System Operator Certification and Credential Maintenance Program is available on the NERC website.

2023-2025 Areas of Focus

Key areas of focus for Personnel Certification and Credential Maintenance include:

- Evaluating the results of the credential maintenance research project that was completed in 2022
- Seeking industry input on improvement opportunities for the Personnel Certification and Credential Maintenance Program and development and implementing any changes
- Annual analysis of System Operator Certification Program Manual Appendix A topics (recognized operator training topics) and credential maintenance requirements

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes support for exam testing and development, credential maintenance audit and review services, and the System Operator Certification Continuing Education Database (SOCCED).

2023 Technology Requirements

The majority of the Office Costs budget is related to software license and support for SOCCED. The Fixed Assets budget includes expenditures for SOCCED enhancements.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the merit and market adjustments discussed in the *Introduction* and *Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is due to the PCGC's planned return to the pre-pandemic number of in-person meetings.

Contractors & Consultants

The decrease in Contractors & Consultants expenses is due to the completion of a credential maintenance research project in 2022.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for the Personnel Certification and Credential Maintenance program is due to the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Fixed Asset Additions

The increase for Fixed Asset Additions is related to the enhancements for SOCCED discussed in the Technology Requirements above.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

20				ixed Asset Addi and 2023 Budg		15				
		<u> </u>		edential Mainte		nce				
		2022 Budget		2022 Projection		Variance 2022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)
Funding										
NERC Funding										
NERC Assessments	\$	-	\$	-	\$	-	\$	-	\$	-
Penalties Released	_	-	_	-	_	-	,	-	_	-
Total NERC Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		1,756,723		1,732,452		(24,271)		1,781,775		25,052
Services & Software		-		-		-		-		-
Miscellaneous		-		-		-		-		-
Interest & Investment Income		500		2,000		1,500		500		-
Total Funding (A)	\$	1,757,223	\$	1,734,452	\$	(22,771)	\$	1,782,275	\$	25,052
Expenses										
Personnel Expenses										
Salaries	\$	318,852	\$	334,906	\$	16,054	\$	340,141	\$	21,289
Payroll Taxes		23,835		23,742		(93)		24,946		1,111
Benefits		43,222		42,477		(745)		43,337		115
Retirement Costs		35,638		37,444		1,806		38,117		2,479
Total Personnel Expenses	\$	421,547	\$	438,570	\$	17,022	\$	446,540	\$	24,993
Meetings & Travel Expenses										
Meetings & Conference Calls	\$	32,000	¢	25,600	¢	(6,400)	¢	68,000	¢	36,000
Travel	7	14,000	7	11,200	7	(2,800)	Y	18,000	7	4,000
Total Meetings & Travel Expenses	\$	46,000	\$	36,800	\$	(9,200)	\$	86,000	\$	40,000
Operating Expenses, excluding Depreciation										
Contractors & Consultants	\$	463,188	\$	463,188	\$	-	\$	407,750	\$	(55,438)
Office Rent		-		-		-		-		-
Office Costs		166,600		184,565		17,965		168,300		1,700
Professional Services		-		-		-		-		-
Miscellaneous	_	300	\$	300	\$	17,965	\$	300	ć	- (E2 720)
Total Operating Expenses, excluding Depreciation	\$	630,088		648,053		•		576,350	\$	(53,738)
Total Direct Expenses	\$	1,097,635	\$	1,123,423	\$	25,787	\$	1,108,890	\$	11,255
Indirect Expenses	\$	702,307	\$	756,281	\$	53,975	\$	798,595	\$	96,288
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenses (B)	\$	1,799,942	\$	1,879,704	\$	79,762	\$	1,907,485	\$	107,543
Change in Net Assets (=A-B)	\$	(42,719)	\$	(145,252)	\$	(102,533)	\$	(125,210)	\$	(82,491)
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	72,652	\$	59,986	\$	(12,666)	\$	115,209	\$	42,557
Financing Activity										
Loan or Financing Lease - Borrowing (-)	\$	(41,516)	Ś	(43,816)	Ś	(2,300)	Ś	(78,517)	\$	(37,001)
Loan or Financing Lease - Principal Payments (+)	7	12,356	7	11,163	7	(1,193)	Ψ.	17,586	7	5,230
Net Financing Activity (D)	\$	(29,160)	\$	(32,653)	\$	(3,494)	\$	(60,932)	\$	(31,772)
Total Budget (=B+C+D)	\$	1,843,435	\$	1,907,037	\$	63,602	\$	1,961,763	\$	118,328
Change in Working Capital (=A-B-C-D)	\$	(86,212)	\$	(172,585)	\$	(86,373)	\$	(179,488)	\$	(93,276)

2.82

2.90

0.08

2.82

0.00

FTEs

Training and Education

	Training and Educa	atio	n	
	(in whole dolla	ırs)		
	Increase			
alina - maining contrains atten	2022 Budget		2023 Budget	(Decrease)
FTE Reporting	1.88		1.88	-
Direct Expenses	\$ 538,358	\$	587,898	\$ 49,540
Indirect Expenses	468,205		532,397	64,192
Other Non-Operating Expenses	-		-	-
Fixed Asset Additions	48,435		43,473	(4,962)
Financing Activity	(19,440)		(40,621)	(21,181)
Total Budget	\$ 1,035,557	\$	1,123,146	\$ 87,589

Purpose and Scope

Section 901 of the NERC Rules of Procedure acknowledges the need to acquire and sustain informed, knowledgeable, and skilled personnel in order to assure the reliable operation of the North American bulk power system (BPS). The Training and Education group facilitates the learning and development of NERC¹⁵ and ERO Enterprise staff as well as BPS industry participants. The program oversees and coordinates learning activities and resources that support the acquisition and increase of knowledge and skills among stakeholders. Learners are typically engaged through learning events and products and resources, such as custom-made and off-the-shelf interactive self-paced e-learning modules, video-based learning, and inperson and live-webinar instructor-led training.

2023-2025 Areas of Focus

Key areas of focus for Training and Education include support related to:

- Leadership development, new hire orientation, and confidential information training
- Events, including GridEx and the annual ERO Enterprise Compliance Monitoring and Enforcement Program (CMEP) Staff Workshop
- Training materials for the Align CMEP tool

2023 Resource Requirements

There is no change in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget. The Contractors & Consultants budget includes support for various training initiatives, including those that specifically support learning for and growth of the ERO Enterprise.

2023 Technology Requirements

The majority of the Office Costs budget is related to software license and support for the content and platform for a learning management system platform.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the merit and market adjustments discussed in the *Introduction* and *Executive Summary*.

¹⁵ NERC's Human Resources budget includes funding for general NERC employee training and development.

Office Costs

The increase for Office Costs is related to cost increases for the software discussed in the Technology Requirements above.

Indirect Costs

Costs incurred for Administrative Programs are considered indirect and are allocated to the statutory departments based on the ratio of each department's budgeted FTEs to total budgeted statutory FTEs. The increase for the Training and Education program is due to the overall increase in costs for the Administrative Programs, particularly in IT due to the Technology Strategy discussed in the *Introduction and Executive Summary*.

Net Financing Activity

The change in Net Financing Activity is due to the allocation of financing activity (net result of proceeds and payments) that is budgeted in the General and Administrative area for anticipated financing of capital software projects in 2023 as discussed in the *Introduction and Executive Summary*.

		ctivities and F : & Projection		Asset Additior 2023 Budget	ıs						
		aining and Ed									
		2022 Budget		2022 Projection	,	Variance 022 Projection v 2022 Budget Over(Under)		2023 Budget		Variance 2023 Budget v 2022 Budget Over(Under)	
Funding											
NERC Funding											
NERC Assessments	\$	1,034,520	\$	1,034,520	\$	-	\$	1,122,138	\$	87,618	
Penalties Released				-		-			_	-	
Total NERC Funding	_\$	1,034,520	\$	1,034,520	\$	-	\$	1,122,138	\$	87,618	
Third-Party Funding	\$	-	\$	_	\$	_	\$	-	\$	_	
Testing, Renewal, & Continuing Ed Fees		-		_	·	-		-	·	-	
Services & Software		-		-		-		-		-	
Miscellaneous		-		-		-		-		-	
Interest & Investment Income		1,038		368		(670)		1,009		(29)	
Total Funding (A)	\$	1,035,557	\$	1,034,888	\$	(669)	\$	1,123,146	\$	87,589	
Expenses											
Personnel Expenses		224222		245 000			_	242.005		45.045	
Salaries	\$	234,880	\$	245,896	\$	11,016	\$	249,925	\$	15,045	
Payroll Taxes Benefits		18,880 49,040		14,151 48,010		(4,729) (1,030)		20,183 48,836		1,303 (204)	
Retirement Costs		26,357		27,637		1,280		31,154		(204) 4,797	
Total Personnel Expenses	\$	329,158	\$	335,694	\$	6,537	Ś	350,098	\$	20,940	
		020,200	<u> </u>	,	<u> </u>	5,551	*	,			
Meetings & Travel Expenses											
Meetings & Conference Calls	\$	2,000	\$	1,600	\$	(400)	\$	2,000	\$	-	
Travel		3,500		2,800		(700)		3,500		-	
Total Meetings & Travel Expenses	\$	5,500	\$	4,400	\$	(1,100)	\$	5,500	\$	-	
Operating Expenses, excluding Depreciation											
Contractors & Consultants	\$	100,000	Ś	100,000	Ś	_	\$	90,000	Ś	(10,000)	
Office Rent	•	-	•	-	•	-		-	·	-	
Office Costs		103,000		103,000		-		141,600		38,600	
Professional Services		-		-		-		-		-	
Miscellaneous		700		700		-		700		-	
Total Operating Expenses, excluding Depreciation	\$	203,700	\$	203,700	\$	-	\$	232,300	\$	28,600	
Total Direct Expenses	\$	538,358	\$	543,794	\$	5,436	\$	587,898	\$	49,540	
Indirect Expenses	\$	468,205	\$	505,926	\$	37,722	\$	532,397	\$	64,192	
Other Non-Operating Expenses	\$	-	\$	-	\$	-	\$	-	\$	-	
Total Expenses (B)	\$	1,006,562	\$	1,049,720	\$	43,158		1,120,295	\$	113,733	
Change in Net Assets (=A-B)	\$	28,995	\$	(14,832)	\$	(43,827)	\$	2,852	\$	(26,143)	
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	48,435	\$	40,129	\$	(8,306)	\$	43,473	\$	(4,962)	
Financing Activity		(0= 6==)		(22.24.)	,	/a 60 ::		/F2 2 4=1		(2	
Loan or Financing Lease - Borrowing (-)	\$	(27,677)	\$	(29,311)	\$	(1,634)	Ş	(52,345)	\$	(24,668)	
Loan or Financing Lease - Principal Payments (+) Net Financing Activity (D)	\$	8,237 (19,440)	¢	7,467 (21,844)	ć	(770) (2,404)	¢	11,724 (40,621)	ċ	3,486 (21,181)	
Net Financing Activity (D)		(13,440)	Ç	(21,044)	ŗ	(2,404)	Ģ	(40,021)	ş	(21,181)	
Total Budget (=B+C+D)	\$	1,035,557	\$	1,068,006	\$	32,448	\$	1,123,146	\$	87,589	
Change in Working Capital (=A-B-C-D)	\$	-	\$	(33,118)	\$	(33,118)	\$	-	\$	-	
FTEs		1.88		1.94		0.06		1.88		0.00	

Administrative Programs

		Adı	min	istrative Progran	าร				
			(ir	n whole dollars)					
	Diı	rect Expenses,		FTEs					
						Increase	2022	2023	Increase
	2	022 Budget		2023 Budget		(Decrease)	Budget	Budget	(Decrease)
General & Administrative	\$	12,536,346	\$	9,020,093	\$	(3,516,253)	18.80	19.74	0.94
Legal and Regulatory		5,123,376		5,552,134		428,758	15.98	16.92	0.94
Information Technology		14,026,598		20,442,840		6,416,242	27.50	31.21	3.71
Human Resources & Administration		3,852,313		4,334,818		482,505	11.28	12.22	0.94
Finance and Accounting		2,186,385		2,881,218		694,833	7.52	8.46	0.94
Total Administrative Programs	\$	37,725,018	\$	42,231,103	\$	4,506,085	81.08	88.55	7.47

Scope and Functional Description

NERC's Administrative Programs area includes the budget for all business and administrative functions of the organization, including (1) General and Administrative; (2) Legal and Regulatory; (3) Business (Information) Technology; (4) Human Resources and Administration; (5) Finance and Accounting; and (6) other general administrative expenses necessary to support program area activities. The costs of the Administrative Programs functions are allocated to the statutory programs as indirect expenses.

General and Administrative

The General and Administrative (G&A) area is responsible for the administration and general management of the organization. Expenses allocated in this area include Office Rent as well as personnel and related costs for (1) the Chief Executive Officer (CEO), the Chief Engineer, the Chief Administrative Officer (CAO), and their support staff; (2) External Affairs staff, and (3) Board of Trustees (Board) costs. The \$3.5M decrease in the G&A budget is attributed to the capital financing assumptions discussed in the *Introduction and Executive Summary*, including loan proceeds of \$4.0M, which is budgeted in G&A and allocated to the statutory program areas as indirect costs.

External Affairs

The External Affairs group includes staff who are focused on three areas: (1) addressing policy matters that arise in legislative arenas and managing regulatory outreach; (2) managing all external and internal communications that support NERC initiatives, including editing and design of assessments/documents, media coordination and messaging, the public NERC website, social media, and other outreach, such as newsletters, as well as facilitating consistent messaging internally and across the ERO Enterprise; and (3) serving as the liaison with government entities and industry stakeholders in Mexico and Canada.

Board Costs

The following table details the Board costs included in the total G&A expenses.

Board of Trustee Expenses	2022 Budget		2023 Budget		Increase (Decrea	se)
Meeting and Travel Expenses						
Quarterly Board Meetings	\$ 240,000	\$	240,000	\$	-	0.0%
Trustee Travel	160,000	·	200,000	·	40,000	25.0%
Total	\$ 400,000	\$	440,000	\$	40,000	10.0%
Professional Services						
Independent Trustee Fees	\$ 1,580,000	\$	1,568,500	\$	(11,500)	-0.7%
Trustee Search Fees	-		-		-	
Total	\$ 1,580,000	\$	1,568,500	\$	(11,500)	-0.7%
Total	\$ 1,980,000	\$	2,008,500	\$	28,500	1.4%

The increase for Meeting and Travel expenses is due to the planned return to some in-person Board meetings and related travel, which is discussed in the *Introduction and Executive Summary*. The slight decrease for independent trustee fees is due to adjusting the anticipated trustee compensation in 2023, which is based on the independent study on trustee compensation completed at the end of 2021.

Legal and Regulatory

The Legal and Regulatory department supports the NERC program areas and is 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. The department also addresses legal and regulatory matters that arise in connection with NERC's role as the Electric Reliability Organization and the delegation agreements with the Regional Entities. Additionally, the Legal and Regulatory department includes the Internal Audit and Corporate Risk Management functions, explained further below.

Internal Audit

The Internal Audit group performs independent, objective activities (i.e., audits and assessments) designed to add value and improve NERC and Regional Entity operations. The activities ensure that (1) risks are appropriately identified, managed, and monitored across NERC and the ERO Enterprise; (2) internal control systems are adequately promoted and are effectively functioning; and (3) significant risk exposures and control issues, including fraud risks, governance issues, and other matters needed or requested by the Board are reported. Internal Audit specifically engages with NERC's Compliance and Certification Committee (CCC) to collaborate on monitoring of the ERO Enterprise as contemplated by Sections 406, 506, and Appendix 4A of the NERC Rules of Procedure.

Corporate Risk Management

The Corporate Risk Management (CRM) area focuses on ERO Enterprise corporate financial, operational, legal, regulatory, and compliance risks. NERC's current enterprise risk management (ERM) process is conducted annually, based on the Committee of Sponsoring Organization of the Treadway Commission (COSO) framework. The results of the ERM process serve as a roadmap in developing the company's corporate risk, compliance, and ethics framework. The CRM group also works with the Regional Entities to enhance the ERO Enterprise-wide corporate risk identification and risk mitigation efforts, resulting in more streamlined and coordinated reports and harmonized assessment of ERO Enterprise risks and processes.

Business Technology

NERC's Business (Information) Technology department provides the technology and management needed for the organization to maintain daily operations and meet ERO statutory obligations, including applications and infrastructure leveraged by the ERO Enterprise and registered entities. The Business Technology department includes a Project Management Office (PMO) that provides project management skills and leadership for major ERO Enterprise and NERC business technology projects. NERC's Business Technology department focuses on five key areas: cyber security, NERC infrastructure support, the Electricity Information Sharing and Analysis Center (E-ISAC), ERO Enterprise application and infrastructure support, and ERO Enterprise new functionality. Business Technology manages NERC's overall Technology Strategy, which is discussed in more detail in the *Introduction and Executive Summary*.

Human Resources and Administration

The Human Resources (HR) and Administration functions primarily include payroll, benefits and retirement plan administration, employee relations, performance and compensation management, training and development, facilities management, and meeting planning and coordination. The HR group manages NERC's overall People Strategy, which is designed to create an employee experience that meets the expectations of an evolving workforce and attracts, retains, and engages top talent by supporting a

more sustainable, diverse, post-pandemic organization. This three-phased plan is intended to transform the HR practices to be more strategic to ensure NERC has the talent to meet its goals as outlined in its four areas of focus. A critical component to NERC's People Strategy is workforce planning, which is discussed in more detail in the *Introduction and Executive Summary*.

Finance and Accounting

NERC's Finance and Accounting department manages all finance and accounting functions, including accounts payable and receivable, assessment and Cybersecurity Information Sharing Program (CRISP) billing, travel and expense reporting, budget management, financial reporting, corporate insurance program management, coordination of the annual external financial statement audit and Form 990, and property, sales, and use tax returns. This area also holds primary responsibility for the development of the annual business plan and budget and associated stakeholder outreach efforts. NERC Finance and Accounting manages systems, policies, procedures, and controls governing day-to-day practices, including procurement, expense reimbursement, and back office systems and procedures.

2023-2025 Areas of Focus

Key areas of focus for the Administrative Programs include:

- Continuing to enhance state outreach and engagement, including further developed outreach for ERO Enterprise assessments and reports, and expanding collaboration efforts with the National Association of Regulatory Utility Commissioners (NARUC) and government partners
- Maturing internal assurance programs, including internal audit, risk management, and contingency planning
- Enhancing cyber security to focus on prevention, detection, and mitigation and designing technology solutions for today's security and environment, supported by Information Technology (IT) policies, processes, and procedures that align with standard cyber frameworks and internal assurance programs
- Supporting adaptable and sustainable technology, including technical roadmaps that accelerate
 adoption of cloud computing and quality assurance programs that improve disaster recovery,
 testing capability, and solution performance and security
- Increasing automation and controls across the HR and Finance and Accounting areas, and providing meaningful data to track metrics and measure efficiency

2023 Resource Requirements

The 7.47 increase in full-time equivalents (FTEs) from the 2022 budget to the 2023 budget is for additional roles in External Affairs, Legal and Regulatory, Business Technology, and Finance and Accounting related to supporting the security and sustainability of the organization, particularly in the areas of cyber security, cloud computing, internal controls, procurement, and communications. The Contractors & Consultants budget includes various support and consulting needs across the Administrative Programs, with the largest investments related to the Technology and People Strategies discussed in the *Introduction and Executive Summary*. This includes support for application and infrastructure, cyber security, and PMO in the Business Technology department, and HR functional services, such as executive coaching, leadership training, and payroll processing. Additional contractor and consultant expenses in the Administrative Programs include support for Internal Audit, existing Finance and Accounting and HR systems, as well as discovery activities for a more integrated, cloud-based Finance and Accounting and HR system.

2023 Technology Requirements

The majority of the Office Costs budget is related to software licenses and support for the Administrative Programs, especially in Business Technology for the software required to support cyber security and overall daily operations. The Fixed Assets Additions budget includes funding for capital software projects in the Business Technology department that benefit company operations, including infrastructure investments in operational sustainability, enhancements for cyber security and data loss prevention systems, and upgrades to Microsoft SharePoint and collaboration tools, as well as technology equipment and server upgrades, including lease-financed technology equipment. The Fixed Assets Additions budget for the Administrative Programs also includes funds for enhancements to existing Finance and Accounting and HR systems.

Explanation of Significant Cost Changes from 2022 to 2023

Personnel

The increase for Personnel is related to the increase in FTEs explained above and merit and market adjustments discussed in the *Introduction and Executive Summary*.

Meetings & Travel

The increase for Meetings & Travel is related to a planned return to some in-person meetings following pandemic conditions as discussed in the *Introduction and Executive Summary*.

Office Rent

The decrease in Office Rent is due to lease concessions related to the Atlanta office, which are being applied to budgeted rent for the remaining term of the lease that ends in October 2025.

Office Costs

The increase in Office Costs is primarily related to the Business Technology software licenses and support expenses discussed in the Technology Requirements above, including those related to the overall Technology Strategy and annual escalation for existing software agreements.

Professional Services

The increase in Professional Services is primarily due to increased insurance costs reflecting market pressures on liability insurance.

Fixed Asset Additions

Fixed Asset Additions expenditures budgeted for the Administrative Programs are allocated to the statutory program areas as indirect costs. Though there is a significant increase in capital software projects in the Administrative Programs in 2023 related to the Technology Requirements discussed above, there is a decrease in these expenditures from 2022 to 2023. This is due to one-time purchases budgeted in 2022 for (1) audio/visual equipment funded by a lease program (which is budgeted in Fixed Assets Additions and directly offset by lease proceeds reflected in Net Financing Activity) and (2) office furniture and leasehold improvement expenditures (which were planned to be funded by reserves). ¹⁶

Net Financing Activity

The change in Net Financing Activity is due to the capital financing assumptions discussed in the *Introduction and Executive Summary*, including loan proceeds of \$4.0M, which is budgeted in G&A and allocated to the statutory program areas as indirect costs.

¹⁶ These expenditures were for a new Atlanta office lease in 2022 that did not materialize.

		of Activities and				S				
202		get & Projectio			et					
		Administrative	Pro	grams		Variance				Variance
						2022 Projection				2023 Budget
		2022		2022		v 2022 Budget		2023	v	2022 Budget
		Budget		Projection		Over(Under)		Budget	•	Over(Under)
Funding										
NERC Funding										
NERC Assessments	\$	(773,146)	\$	(773,146)	\$	-	\$	(1,000,000)	\$	(226,854)
Penalties Released		-		-		-		-		-
Total NERC Funding	\$	(773,146)	\$	(773,146)	\$	-	\$	(1,000,000)	\$	(226,854)
Third-Party Funding	\$	-	\$	-	\$	-	\$	-	\$	-
Testing, Renewal, & Continuing Ed Fees		-		-		-		-		-
Services & Software		-		-		-		-		-
Miscellaneous		-		-		-		-		-
Interest & Investment Income	_	-		-	_	-		-		-
Total Funding (A)	\$	(773,146)	\$	(773,146)	\$	-	\$	(1,000,000)	\$	(226,854)
Expense`										
Personnel Expenses										
Salaries	\$	15,540,598	\$	15,755,712	\$	215,114	\$	17,970,873	\$	2,430,275
Payroll Taxes		834,316		845,160		10,844		935,516		101,200
Benefits		2,336,350		2,377,648		41,298		2,623,091		286,741
Retirement Costs	_	1,416,863	_	1,428,353	_	11,489	_	1,744,448	_	327,584
Total Personnel Expenses	\$	20,128,127	\$	20,406,872	\$	278,745	\$	23,273,928	\$	3,145,801
Meetings & Travel Expenses										
Meetings & Conference Calls	\$	557,550	\$	490,150	\$	(67,400)	\$	593,400	\$	35,850
Travel		520,000		446,000		(74,000)		761,000		241,000
Total Meetings & Travel Expenses	\$	1,077,550	\$	936,150	\$	(141,400)	\$	1,354,400	\$	276,850
Operating Expenses, excluding Depreciation										
Contractors & Consultants	\$	3,218,406	\$	3,616,602	\$	398,196	\$	4,945,510	\$	1,727,104
Office Rent		3,243,277		3,191,370		(51,907)		3,022,266		(221,011)
Office Costs		5,375,408		5,514,320		138,912		6,580,619		1,205,211
Professional Services		2,283,100		2,388,924		105,824		2,425,596		142,496
Miscellaneous		119,150		119,649		499		182,783		63,633
Total Operating Expenses, excluding Depreciation	\$	14,239,341	\$	14,830,865	\$	591,524	\$	17,156,774	\$	2,917,433
Total Direct Expenses	\$	35,445,018	\$	36,173,887	\$	728,869	\$	41,785,102	\$	6,340,084
Indirect Expenses	\$	(35,525,018)	\$	(36,246,739)	\$	(721,721)	\$	(42,006,102)	\$	(6,481,084)
Other Non-Operating Expenses	\$	80,000	\$	72,852	\$	(7,148)	\$	221,000	\$	141,000
Total Expenses (B)	\$	-	\$	_	\$	_	\$	-	\$	-
Change in Net Assets (=A-B)	\$	(773,146)	\$	(773,146)	\$	-	\$	(1,000,000)	\$	(226,854)
Fixed Asset Additions evaluating Bight of Hea Assets (C)			Ļ				¢		ć	
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	-	\$	-	\$	-	\$	-	\$	-
Financing Activity										
Loan or Financing Lease - Borrowing (-)	\$	-	\$	-	\$	-	\$	-	\$	-
Loan or Financing Lease - Principal Payments (+)		-		-		-	_	-		-
Net Financing Activity (D)	\$	-	\$	-	\$		\$		\$	-
Total Budget (=B+C+D)	\$	-	\$	-	\$	-	\$	-	\$	-
Change in Working Capital (=A-B-C-D)	\$	(773,146)	\$	(773,146)	\$	-	\$	(1,000,000)	\$	(226,854)
FTEs		81.08		78.49		(2.59)		88.55		7.47

Section B – Supplemental Financial Information

Breakdown by Statement of Activity Sections

The following detailed schedules support the consolidated Statement of Activities.

Table B-1 – Total Reserves Analysis

		ota	l Reseves An	alys	is						
			Statutory								
	Total Reserves		Future Obligation Reserve ¹	c	Operating ontingency Reserve ²	Ce	System Operator ertification Reserve	CRISP Special Projects Reserve ³	CRISP Operating Reserve ³	CRISP Defense Fund Reserve ⁴	Assessment Stabilization Reserve
Beginning Reserves - 1/1/2022	\$ 16,101,643	\$	1,381,843	\$	8,728,678	\$	915,083	\$ 445,316	\$ 1,596,902	\$ 512,821	\$ 2,521,000
Generation(use) of reserves from 2022 projections Projected 2022 operating results, including debt service and financing Budgeted addition(use) of reserves Other addition(use) of reserves Projected Reserves - 12/31/2022	\$ 42,348 (530,094) 907,756 \$ 16,521,653	\$	708,893 (679,629) 882,756 2,293,863	\$	90,710 (64,253) - 8,755,135	\$	(86,374) (86,212) - 742,497	\$ (445,316) - - -	\$ (225,565) 300,000 - 1,671,337	25,000 537,821	\$ 2,521,000
Projected Reserves - 12/31/2023 Addition(use) of reserves Less: Assessment Stabilization Reserve Release - Penalties	\$ 14,626,006 (895,647) (1,000,000)		2,577,704 283,841	\$	7,755,135 (1,000,000)	\$	563,009 (179,488)	\$ - - -	\$ 1,671,337 - -	\$ 537,821 - -	\$ 1,521,000 - (1,000,000)
Total Adjustments to Reserves	\$ (1,895,647)	\$	283,841	\$	(1,000,000)	\$	(179,488)	\$ -	\$ -	\$ -	\$(1,000,000)
Assessment Reconciliation 2023 Expenses, Capital Expenditures, & Net Financing Less: Assessment Stabilization Reserve Release - Penalties Addition(use) of reserves Less: Other Funding Sources 2023 NERC Assessment	\$ 101,001,613 (1,000,000) (1,179,488) (11,747,445) \$ 87,074,681										

¹As explained in the discussion of reserves in the *Introduction and Execuitve Summary*, the Future Obligations Reserve offsets future, non-current liabilities.

See the 2023 Reserves discussion in the *Introduction and Executive Summary* for further details on the reserve categories and factors impacting reserve balances in 2023.

²Except as otherwise approved by the Board, after review by the FAC, the amount of the Operating Contingency Reserve shall be between three and one half (3.5%) percent and seven (7%) percent of the company's total expense, fixed asset, and net financing budget minus the sum of the System Operator Certification and CRISP budgets, each of which have separate reserves.

³In an Order issued July 8, 2022, the Commission approved NERC's request for approval (1) to annually redirect underruns of the prior year's CRISP budget to the CRISP Operating Reserve, and (2) to redirect underruns from CRISP Operational Technology pilot budgeted funds to the CRISP Special Projects Reserve. North American Electric Reliability Corp., 180 FERC ¶ 61,013 (Letter Order July 8, 2022).

⁴The CRISP Defense Fund Reserve is intended to fund any expenses related to investigation and defense in connection with a claim pertaining to the CRISP agreement between NERC and participating utilities.

Table B-2 – Penalties

Penalty Sanctions and Allocation Method

NERC Rules of Procedure (ROP) Section 1107.2 specifies that penalty monies received by NERC during the 12 months ended June 30 are to be used in the subsequent budget year to offset assessments. In 2015, the Board of Trustees (Board) approved an updated *Working Capital and Operating Reserves Policy* that was approved by the Federal Energy Regulatory Commission (FERC). This updated policy allows NERC, with Board and FERC approval pursuant to ROP Section 1107.4, to place penalty funds into an Assessment Stabilization Reserve (ASR) for use in future years to offset assessments. Penalty sanctions released from the ASR are allocated to the following statutory programs to reduce assessments: (1) Reliability Standards and Power Risk Issues Strategic Management, (2) Compliance Assurance and Organization Registration and Certification, (3) Compliance Enforcement, (4) Reliability Assessment and Performance Analysis (RAPA), (5) Situation Awareness, (6) Event Analysis, (7) the Electricity Information Sharing and Analysis Center (E-ISAC), including the Cybersecurity Risk Information Sharing Program (CRISP), and (8) Training and Education. Penalty sanctions are allocated based on the number of full-time equivalents (FTEs) in the program divided by the aggregate total FTEs in the programs receiving the allocation.

NERC did not collect any penalties during the period July 1, 2021 to June 30, 2022 and is not requesting to deposit any funds into the ASR. The 2023 assessment includes a proposed release of \$1.0M from this reserve. The balance held in the ASR will be used for assessment offsets to stabilize and reduce assessments in future years.

Penalty Sanctions	Date Received	Amo	ount Received
Penalties received between 7/1/2021 and 6/30/2022			
	N/A	\$	
		\$	
Penalties received prior to 6/30/2021, held in the assessment st	tabilization reserve	\$	2,521,000
Total penalties available on 1/1/2023 to offset assessments		\$	2,521,000
Adjustments			
Total penalties released to offset assessments in the 2023 Budge	et	\$	(1,000,000)
Total penalties held in Assessment Stabilization Reserve 12/31	/2023	\$	1,521,000

Table B-3 — Outside Funding

Outside Funding Breakdown By Program		2022		2023	Increase		
(Excludes Any Penalty/Reserve Releases)		Budget		Budget	(Decrease)	
							
Reliability Standards and PRISM							
Interest & Investment Income Allocation	\$	10,895	\$	10,592	\$	(303)	
Total	\$	10,895	\$	10,592	\$	(303)	
Compliance Assurance, Certification, and Registrat	tion						
Interest & Investment Income Allocation	\$	11,933	\$	12,105	\$	172	
Total	\$	11,933	\$	12,105	\$	172	
	· · ·	<u> </u>	•	•	•		
Compliance Enforcement							
Interest & Investment Income Allocation	\$	6,744	\$	6,557	\$	(188)	
Total	\$	6,744	\$	6,557	\$	(188)	
Poliability Assessment and Poyformanse Analysis							
Reliability Assessment and Performance Analysis Services and Software	\$	60,000	\$	60,000	\$		
Interest & Investment Income Allocation	Ş		Ş	15,636	Ş	1 100	
	\$	14,527			<u>,</u>	1,109	
Total	•	74,527	\$	75,636	\$	1,109	
Personnel Certification and Credential Maintenan	ce						
Testing Fees	\$	496,600	\$	526,500	\$	29,900	
Certificate Renewals		825,000		764,000		(61,000)	
Continuing Education Fees		435,123		491,275		(4,875)	
Interest & Investment Income Allocation		500		500		-	
Total	\$	1,757,223	\$	1,782,275	\$	(35,975)	
mostation and make a							
Training and Education	¢	1.020	ċ	1 000	<u>د</u>	(20)	
Interest & Investment Income Allocation	\$	1,038	\$	1,009	\$	(29)	
Total	\$	1,038	\$	1,009	\$	(29)	
Event Analysis							
Interest & Investment Income Allocation	\$	3,632	\$	3,531	\$	(101)	
Total	\$	3,632	\$	3,531	\$	(101)	
Situation Augranass							
Situation Awareness Interest & Investment Income Allocation	\$	4,150	\$	4,035	\$	(115)	
	, \$	4,150 4,150	\$ \$	4,035	\$ \$		
Total	Ş	4,130	Ą	4,035	Ą	(115)	
E-ISAC							
Third Party Funding (CRISP)	\$	7,628,423	\$	9,569,170	\$	1,940,747	
Miscellaneous Funding		60,000		260,000		200,000	
Interest & Investment Income Allocation		23,082		22,537		(545)	
Total	\$	7,711,505	\$	9,851,706	\$	2,140,202	
Count Tabel		0.504.646		44 =		2464 ====	
Grand Total	\$	9,581,646	\$	11,747,445	\$	2,104,772	

Testing Fees and Certificate Renewals – The \$30k increase in testing fees and \$61k decrease in certificate renewals reflects the estimate of the numbers of tests and renewals in 2023.

Third Party Funding (CRISP) – The \$1.2M increase is related to increased operational costs and market pressures on insurance for the contract with the Pacific Northwest National Laboratory (PNNL).

Miscellaneous Funding – The \$200K increase for miscellaneous funding in E-ISAC is related to anticipated revenue from a new Vendor Affiliate Program. See *Section A – Electricity Information Sharing and Analysis Center* for more discussion on E-ISAC and CRISP funding.

Table B-4 – Personnel

Personnel	2022 Budget	2023 Budget	Increase (Decr	ease)
Salaries	\$ 39,557,528	\$ 44,250,356	\$ 4,692,828	11.9%
Payroll Taxes	2,310,836	2,513,603	202,767	8.8%
Benefits	6,038,487	6,624,553	586,066	9.7%
Retirement	4,059,585	4,629,894	570,309	14.0%
Total	\$ 51,966,435	\$ 58,018,406	\$ 6,051,971	11.6%
FTEs	223.72	236.88	13.16	5.9%
Cost per FTE				
Salaries	\$ 176,817	\$ 186,805	\$ 9,988	5.6%
Payroll Taxes	10,329	10,611	282	2.7%
Benefits	26,991	27,966	975	3.6%
Retirement	18,146	19,545	1,399	7.7%
Total	\$ 232,283	\$ 244,927	\$ 12,644	5.4%

The increase in overall Personnel costs is primarily related to the increase of 13.2 FTEs and salary and benefit increase assumptions. See the People Strategy and 2023 Program Budget and FTE Comparisons sections in the *Introduction and Executive Summary* for more details.

Table B-5 - Meetings & Travel

Meetings & Travel	2022 Budget	2023 Budget	Increase (Dec	rease)
Meetings & Conference Calls Travel	\$ 1,132,550 1,475,500	\$ 1,291,650 1,853,900	\$ 159,100 378,400	14.0% 25.6%
Total	\$ 2,608,050	\$ 3,145,550	\$ 537,500	20.6%

Meetings & Travel expenses are increasing as NERC continues to return to some in-person meetings and related travel (following a reduction in these budget areas in 2021 and 2022 related to the pandemic), while continuing to leverage efficiencies of virtual meeting formats. See the Meetings and Travel discussion in the *Introduction and Executive Summary* for more details.

Table B-6 – Contractors and Consultants

For discussion on the changes below, see the Resource Requirements sections of each program area in Section A – 2022 Business Plan and Budget Program Area and Department Detail.

						(=)
Consultants & Contracts	7	2022 Budget		2023 Budget	lr	ncrease(Decrease)
Reliability Standards	۲.	100.060	ċ	00.730	۲.	/10 221\
Standards and PRISM Application Support	\$	108,960	\$	90,739	\$	(18,221)
Engineering and Standards Support	\$	50,000		112,000	٠.	62,000
Total	Ş	158,960	Ş	202,739	\$	43,779
	\$	75.000	ċ	F0 000	۲.	(25,000)
Compliance Assurance Process Documentation Support	Ş		\$	50,000	\$	(25,000)
Evidence Locker Annual Certification		100,000		100,000		(200,000)
Regional Entity CMEP Audit Support		360,000		40.000		(360,000)
BES Exception Process Application Support		40,000		40,800		800
Workshop Facilitation		19,000		19,000		- (22.5.222)
Total	\$	594,000	\$	209,800	\$	(384,200)
RAPA			_		_	
RAPA Application Support	\$	261,227	\$	301,654	\$	40,427
BPS Security and Grid Transformation Support		-		200,000		200,000
Emerging Technology and Energy Risk Analysis		200,000		250,000		50,000
Probabilistic Analysis		50,000		55,000		5,000
Research Partnerships and Projects		150,000		50,000		(100,000)
Workshop Facilitation		20,000		20,000		-
Total	\$	681,227	\$	876,654	\$	195,427
Event Analysis						
Event Analysis Application Support	\$	88,157	\$	90,802		2,645
Human Performance Activity Support		-	\$	100,000		100,000
Event Analysis Review Support		30,000		30,000		-
Total	\$	118,157	\$	220,802	\$	102,645
Situation Awareness						
Situation Awareness Application Support	\$	15,000	\$	23,000	\$	8,000
Total	\$	15,000	\$	23,000	\$	8,000
E-ISAC						
Security and Other Consulting	\$	87,950	Ś	413,198	\$	325,248
GridEx and Other Events	•	278,000	•	626,000	7	348,000
Technology Support		491,843		447,991		(43,852)
Operations		913,248		940,645		27,397
Partnerships		400,000		400,000		27,337
CRISP PNNL and Other Participant Paid		6,043,520		6,982,599		939,079
CRISP Support		111,300		362,422		251,122
Total	\$	8,325,861	ċ	10,172,855	ċ	1,846,994
Personnel Certification and Credential Maintenance	Ţ	0,323,801	Ą	10,172,833	Ą	1,040,334
	\$	06 100	ċ	110.750	۲	14.562
System Operator Testing Expenses and Examination Development	Ş		\$	110,750	\$	14,562
Special Project and Other Support		140,000		100,000		(40,000)
Continuing Education Audit and Review Services		100,000		120,000		20,000
SOCCED Database Support		125,000		75,000		(50,000)
Translation Services		2,000		2,000		-
Total	\$	463,188	Ş	407,750	Ş	(55,438)
Training and Education						
ERO Enterprise and Industry Learning and Development Support	\$	100,000	\$	90,000	_	(10,000)
Total	\$	100,000	\$	90,000	\$	(10,000)
General and Administrative						
Communications Support	\$	20,000	\$	20,000	\$	-
Executive Support		100,000		100,000		-
Total	\$	120,000	\$	120,000	\$	-
Information Technology						
Applications & Infrastructure, Security, and Ongoing Operations Support	\$	1,733,406	\$	3,420,510	\$	1,687,104
Total	\$	1,733,406	\$	3,420,510	\$	1,687,104
Human Resources						
Training and Development	\$	565,000	\$	440,000	\$	(125,000)
HR Consulting Services		305,000		410,000		105,000
Total	\$	870,000	\$	850,000	\$	(20,000)
Finance and Accounting						, ,
Finance and Accounting Support	\$	185,000	\$	350,000	\$	165,000
Total	\$	185,000	_	350,000	_	165,000
Legal & Regulatory		203,000	-		7	200,000
Internal Audit and Corporate Risk Management Support	\$	300,000	\$	195,000	\$	(105,000)
Workshop Facilitation	7	10,000	ڔ	10,000	Y	(103,000)
Total	\$	310,000	¢	205,000	\$	(105,000)
Total	7	310,000	Ţ	203,000	Ţ	(103,000)
Total Concultants & Contracts	ċ	12 674 700	خ	17 140 110	¢	2 474 244
Total Consultants & Contracts	\$	13,674,799	\$	17,149,110	\$	3,474,311

Table B-7 - Rent

Office Rent	2022 Budget	2023 Budget	Increase (Decr	ease)
Office Rent Maintenance	\$ 3,119,677 123,600	\$ 2,872,266 150,000	\$ (247,411) 26,400	-7.9% 21.4%
Total	\$ 3,243,277	\$ 3,022,266	\$ (221,011)	-6.8%

As discussed in the *Introduction and Executive Summary*, the decrease in Office Rent is due to lease concessions negotiated for the Atlanta office, which are spread over the remaining term (ending in October 2025), offset by a projected increase for maintenance costs for the Atlanta and Washington, D.C. offices.

Table B-8 – Office Costs

Office Costs		2022 Budget		2023 Budget		Increase (De	ecrease)
Telephone	\$	333,838	ć	385,000	\$	51,162	15.3%
Internet	ڔ	325,783	۲	359,249	ڔ	33,466	10.3%
		,		,		,	
Office Supplies		131,350		129,850		(1,500)	-1.1%
Computer Supplies		156,450		196,450		40,000	25.6%
Software License and Support		8,582,357		10,035,952		1,453,595	16.9%
Subscription and Publications		443,894		440,923		(2,971)	-0.7%
Dues		157,850		170,700		12,850	8.1%
Postage		10,500		10,500		-	0.0%
Express Shipping		34,700		75,200		40,500	116.7%
Copying		39,500		39,900		400	1.0%
Audio/Visual and Hardware Lease		280,000		365,000		85,000	30.4%
Equipment Repair/Service Contracts		130,000		144,000		14,000	10.8%
Bank Charges		28,000		30,000		2,000	7.1%
Merchant Card Fees		95,000		97,000		2,000	2.1%
Total	\$	10,749,222	\$	12,479,724	\$	1,730,502	16.1%

Software License and Support includes non-capital software license and support costs, as well as expenses for infrastructure management software, data center co-location, offsite data backup, and network and security monitoring. The \$1.4M increase in this area is related to (1) annual escalation estimates for software licenses for tools used by the Statutory and Administrative Programs, particularly for Information Technology (IT) and (2) new software products to support the Technology Strategy discussed in the *Introduction and Executive Summary*.

The \$41k increase for Express Shipping is due to NERC's shift to a substantially remote workforce following the pandemic. The \$85k increase for Audio/Visual (A/V) and Hardware Lease is due to support costs for a new A/V equipment lease for NERC's new Washington, D.C. office, which is being designed to support collaborative meeting spaces. The remaining changes to Office Costs items are to bring these budgets closer to recent actual costs.

Table B-9 – Professional Services

Professional Services	2022 Budget			2023 Budget	Increase (Decrease)			
		4 500 000		4.500.400	(4.4.50.4)	0.70/		
Independent Trustee Fees	\$	1,580,000	\$	1,568,496	\$ (11,504)	-0.7%		
Trustee Search Fees		-		-	-	0.0%		
Outside Legal		430,000		495,000	65,000	15.1%		
Government Relations		20,000		20,000	-	0.0%		
Accounting and Auditing Fees		160,000		145,000	(15,000)	-9.4%		
Insurance Commercial		284,000		1,040,000	756,000	266.2%		
Outside Services		14,100		22,100	8,000	56.7%		
Total	\$	2,488,100	\$	3,290,596	\$ 802,496	32.3%		

As discussed on in the Administrative Programs section, the slight decrease for independent trustee fees is due to adjusting the anticipated trustee compensation in 2023, based on the independent study on trustee compensation completed at the end of 2021.

The increase for Outside Legal is to bring the budgets closer to recent actual costs. The \$756k increase for Insurance Commercial is to bring the CRISP liability insurance and NERC property and liability insurance budgets closer to projected estimates based on market pressures in this area.

Table B-10 - Miscellaneous

Miscellaneous Expenses	2022 Budget	2023 Budget	Increase (Deci	rease)
Miscellaneous Expense	\$ 10,250	\$ 10,250	\$ -	0.0%
Employee Rewards and Recognition	21,400	52,617	31,217	145.9%
Employee Engagement	85,000	117,917	32,917	38.7%
Sponsorships	28,000	28,000	-	0.0%
Total	\$ 144,650	\$ 208,783	\$ 64,133	44.3%

In support of the People Strategy discussed in the *Introduction and Executive Summary*, the increase of \$31k for Employee Rewards and Recognition is for an employee referral program and the \$33k increase for Employee Engagement is primarily to further develop NERC's internal communications program.

Table B-11 – Other Non-Operating Expenses

Other Non-Operating Expenses	2022 Budget	2023 t Budget			Increase (Decrease)			
Property and Other Tax Expense Interest Expense	\$ 60,000 75,000	\$	100,000 154,254	\$	40,000 79,254	66.7% 105.7%		
Total	\$ 135,000	\$	254,254	\$	119,254	88.3%		

The increase of \$40k for Property and Other Tax Expense is to bring this budget closer to recent actual costs. The \$79k for Interest Expense is related to the capital financing assumptions discussed in the *Introduction and Executive Summary*.

Table B-12 – Fixed Assets

Fixed Asset Additions	2022 Budget	2023 Budget	Increase (Decrease)				
Computer & Software CapEx	\$ 1,268,750	\$ 5,319,000	4,050,250	319.2%			
Furniture & Fixtures CapEx	400,000	-	(400,000)	-100.0%			
Equipment CapEx	750,000	775,000	25,000	3.3%			
Capital Lease Assets	2,100,000	130,000	(1,970,000)	-93.8%			
Leasehold Improvements	400,000	-	(400,000)	-100.0%			
Total	\$ 4,918,750	\$ 6,224,000	\$ 1,305,250	26.5%			

The increase in Computer and Software CapEx is for capital software projects that are part of the Technology Strategy discussed in the *Introduction and Executive Summary* and in the Technology Requirements sections of each program area in *Section A – 2022 Business Plan and Budget Program Area and Department Detail.* Also as mentioned in the *Introduction and Executive Summary*, NERC is projecting to finance \$4.0M of the expenditures for these capital software projects in 2023. The loan borrowing and 2023 loan principal payments are reflected in the Net Financing Activity section of NERC's Statement of Activity and Fixed Asset Additions reports (also see *Exhibit B – Captial Financing* for further details).

The decrease of approximately \$2.0M in Capital Lease Assets is related to the budgeted acquisition of A/V equipment in 2022 that is being funded by a lease. The \$130k budgeted for Capital Lease Assets in 2023 is for a refresh of lease-financed laptops. These capital asset expenditures are directly offset by lease financing borrowing which, along with related lease principal payments, are reflected in the Net Financing Activity section of NERC's Statement of Activity and Fixed Asset Additions reports.

The \$400k decreases for Furniture & Fixtures CapEx and Leasehold Improvments are related to one-time out-of-pocket costs included in the 2022 budget for an Atlanta Office relocation (to be funded by rerserves) that did not materialize.

Table B-13 – 2024 and 2025 Projections

For further details on the 2024 and 2025 projections below, see the 2023–2025 Business Plan and Budget Assumptions section of the *Introduction and Executive Summary*.

Statement of Activities and Fixed Asset Additions 2023 Budget & Projected 2024 and 2025 Budgets

		2023		2024 \$ Change			% Change	2025		\$ Change	% Change	
		Budget		Projection		24 vs 23 24 vs 23		Projection		25 vs 24	25 vs 24	
Funding												
ERO Funding												
NERC Assessments	\$	87,074,681	Ś	97,207,953	Ś	10,133,272	11.6% \$	108,037,108	Ś	10,829,155	11.1%	
Penalties Released	•	1,000,000	•	-		(1,000,000)	-100.0%	-	-	-		
Total NERC Funding	\$	88,074,681	\$	97,207,953	\$	9,133,272	10.4% \$	108,037,108	\$	10,829,155	11.1%	
Third-Party Funding	\$	9,569,170	\$	10,396,131	\$	826,962	8.6% \$	11,294,295	\$	898,164	8.6%	
Testing Fees		1,781,775		1,785,825		4,050	0.2%	1,845,825		60,000	3.4%	
Services & Software		60,000		60,000		-	0.0%	60,000		-	0.0%	
Miscellaneous		260,000		360,000		100,000	38.5%	460,000		100,000	27.8%	
Interest & Investment Income	_	76,500	_	161,500	_	85,000	111.1%	211,500	_	50,000	31.0%	
Total Funding (A)	\$	99,822,125	\$	109,971,409	\$	10,149,284	10.2% \$	121,908,728	\$	11,937,319	10.9%	
Expenses												
Personnel Expenses												
Salaries	Ś	44,250,356	\$	48,521,164	Ś	4,270,808	9.7% \$	52,989,318	Ś	4,468,154	9.2%	
Payroll Taxes	Ψ.	2,513,603	~	2,667,526	~	153,924	6.1%	2,817,431	~	149,904	5.6%	
Benefits		6,624,553		7,297,239		672,686	10.2%	8,005,511		708,272	9.7%	
Retirement Costs		4,629,894		5,062,748		432,854	9.3%	5,529,340		466,592	9.2%	
Total Personnel Expenses	\$	58,018,406	\$	63,548,677	\$	5,530,271	9.5% \$	69,341,599	\$	5,792,922	9.1%	
Meetings & Travel Expenses												
Meetings & Conference Calls	\$	1,291,650	\$	1,279,300	\$	(12,350)	-1.0% \$	1,383,450	\$	104,150	8.1%	
Travel		1,853,900		1,966,900		113,000	6.1%	2,017,300		50,400	2.6%	
Total Meetings and Travel Expenses	\$	3,145,550	\$	3,246,200	\$	100,650	3.2% \$	3,400,750	\$	154,550	4.8%	
Operating Expenses, excluding Depreciation		47.40.440		46.057.600	_	(204 442)	4 70/ 4	40 400 074	_	4 075 470	7.50/	
Contractors and Consultants	\$	17,149,110	\$	16,857,698	Ş	(291,412)	-1.7% \$	18,132,871	\$	1,275,173	7.6%	
Office Rent		3,022,266		3,182,937		160,671	5.3%	3,318,414		135,477	4.3%	
Office Costs Professional Services		12,479,724 3,290,596		13,544,216 3,749,600		1,064,492 459,004	8.5% 13.9%	14,579,740 4,258,604		1,035,524 509,004	7.6% 13.6%	
Miscellaneous		208,783		211,850		3,067	1.5%	212,850		1,000	0.5%	
Total Operating Expenses, excluding Depreciation	\$	36,150,479	\$	37,546,301	\$	1,395,822	3.9% \$	40,502,479	\$	2,956,178	7.9%	
Total Direct Expenses	\$	97,314,435	\$	104,341,178	\$	7,026,743	7.2% \$	113,244,828	\$	8,903,650	8.5%	
Indirect Expenses	\$	-	\$	-	\$	-	0.0% \$	-	\$	-	0.0%	
Other Non-Operating Expenses	\$	254,254	\$	410,506	\$	156,252	61.5% \$	494,352	\$	83,846	20.4%	
Total Expenses (B)	\$	97,568,689	\$	104,751,684	\$	7,182,995	7.4% \$	113,739,180	\$	8,987,496	8.6%	
Change in Net Assets (=A-B)	\$	2,253,436	\$	5,219,725	\$	2,966,289	131.6% \$	8,169,547	\$	2,949,822	56.5%	
Fixed Asset Additions, excluding Right of Use Assets (C)	\$	6,224,000	\$	7,409,500	Ś	1,185,500	19.0% \$	10,657,752	Ś	3,248,252	43.8%	
Fixed Asset Additions, excluding right of Ose Assets (C)	-	6,224,000	Þ	7,409,500	Þ	1,185,500	19.0% \$	10,057,752	Þ	3,248,232	43.8%	
Financing Activity												
Loan or Financing Lease - Borrowing (-)		(4,130,000)		(4,140,000)		(10,000)	0.2%	(4,650,000)		(510,000)	12.3%	
Loan or Financing Lease - Principal Payments (+)		1,338,924		2,119,656		780,732	58.3%	2,846,796		727,140	34.3%	
Net Financing Activity (D)	\$	(2,791,076)	\$	(2,020,344)	\$	770,732	-27.6% \$	(1,803,204)	\$	217,140	-10.7%	
Total Budget (=B+C+D)	\$	101,001,613		110,140,840		9,139,227	9.0% \$	122,593,728		12,452,888	11.3%	
Change in Working Capital (=A-B-C-D)	\$	(1,179,488)	\$	(169,431)	\$	1,010,057	-85.6% \$	(685,001)	\$	(515,570)	304.3%	
FTEs		236.88		248.16		11.28	4.8%	258.50		10.34	4.2%	

Section C – Non-Statutory Activity

NERC has no non-statutory activities.											

Section D – Consolidated Statement of Activities by Program

	Statutory Activities														
Statement of Activities, Fixed Asset Additions, Financing Activity, and Change in Working Capital by Program 2023 Budget	Statutory Total	Reliability Standards and C Power Risk Issue Strategic Management	Compliance Assurance, Registration, and Certification	Event Analysis	Compliance Enforcement	Personnel Certification and Credential Maintenance Tra	Ining and Education	Reliability Assessments and Performance Analysis	Situation Awareness	E-ISAC (including CRISP)	General and Administrative (Includes Executive and External Affairs)	Legal and Regulatory	Information Ho Technology	uman Resources and Administration	Accounting and Finance
Funding															
ERO Funding															
NERC Assessments	+ 0.,0,000	\$ 10,189,372	,	4,054,188 \$		- \$,,	27,027,044	\$ (1,000,000)	\$ - \$	- \$	-	\$ -
Penalties Released	1,000,000	149,148	170,455	49,716	92,330		14,205	120,739	56,818	346,591			<u> </u>	-	
Total NERC Funding	\$ 88,074,681	\$ 10,338,520	\$ 13,980,609 \$	4,103,904 \$	7,269,239	- \$	1,122,138	\$ 18,078,875	\$ 6,006,961	28,174,435	\$ (1,000,000)	\$ - \$	- \$		ş <u>-</u>
Third-Party Funding	\$ 9,569,170	\$ - !	s - s	- \$	- 9	- \$	-	s - :	s - :	9,569,170	s -	s - s	- \$	-	s -
Testing, Renewal, & Continuing Ed Fees	1,781,775	-	-	-	-	1,781,775	-	-	-	-	-	-	-	-	-
Services & Software	60,000	-	-	-	-	-	-	60,000	-	-	-	-	-	-	-
Miscellaneous	260,000	-	-	-	-	-	-	-	-	260,000	-	-	-	-	-
Interest & Investment Income	76,500	10,592	12,105	3,531	6,557	500	1,009	15,636	4,035	22,537	-	-	-	-	-
Total Funding (A)	\$ 99,822,125	\$ 10,349,112	\$ 13,992,714 \$	4,107,435 \$	7,275,796	1,782,275 \$	1,123,146	\$ 18,154,510	\$ 6,010,996	38,026,141	\$ (1,000,000)	\$ - \$	- \$	-	\$ -
Expenses Personnel Expenses Salaries Payroll Taxes Benefits Retirement Costs Total Personnel Expenses Meeting and Travel Expenses Meeting & Conference Calls	\$ 44,250,356 2,513,603 6,624,553 4,629,894 \$ 58,018,406 \$ 1,291,650	200,354 509,360 351,865 \$ 4,206,355	245,841 787,967 467,379 \$ 5,680,248 \$	1,336,089 \$ 72,312 193,518 144,644 1,746,563 \$	126,000 230,201 216,063 2,522,357	24,946 43,337 38,117 446,540 \$	20,183 48,836 31,154 350,098	307,570 747,809 566,745 \$ 6,784,638	77,182 271,648 139,292 \$ 1,770,400	503,699 1,168,786 930,186 11,237,278	224,404 580,325 404,156 \$ 6,161,414	182,382 514,412 377,618 \$ 4,690,595 \$	5,823,349 \$ 332,659 906,267 625,439 7,687,714 \$	2,176,229 114,249 393,049 189,060 2,872,588	81,822 229,038 148,174 \$ 1,861,618
Travel	1,853,900	150,000	270,000	91,000	54,000	18,000	3,500	244,400	16,000	246,000	450,000	120,000	75,000	60,000	56,000
Total Meeting & Travel Expenses	\$ 3,145,550	\$ 225,000	\$ 362,000 \$	116,000 \$	60,500	86,000 \$	5,500	\$ 464,150	\$ 86,000	386,000	\$ 880,000	\$ 130,000 \$	213,400 \$	70,000	\$ 61,000
Operating Expenses, excluding Depreciation Contractors & Consultants Office Rent	\$ 17,149,110 3,022,266	\$ 202,739	\$ 140,800 \$	220,802 \$	69,000	407,750 \$	90,000	\$ 876,654	\$ 23,000	10,172,855	\$ 120,000 3,022,266	\$ 205,000 \$	3,420,510 \$	850,000	\$ 350,000
Office Costs	12,479,724	52,209	746,196	45,750	654,435	168,300	141,600	740,217	1,348,302	2,002,096	423,350	201,539	5,367,500	305,930	282,300
Professional Services	3,290,596	52,209	740,190	45,750	15.000	100,300	141,000	740,217	1,346,302	850.000	1.866.496	325.000	3,367,300	9.100	282,300
	-,,	2.700	2450	4 200	.,	300	700		4 200	9,850	50,567	323,000		-,	.,
Miscellaneous Total Operating Expenses, excluding Depreciation	\$ 36,150,479	2,700 \$ 257,648	3,150 \$ 890,146 \$	1,200 267,752 \$	1,800 740,235			5,000 \$ 1,621,871	1,300 \$ 1,372,602			\$ 731,539 \$	3,717 8,791,727 \$	127,200 1,292,230	1,300 \$ 858,600
Total Direct Expenses	\$ 97,314,435	\$ 4,689,003	\$ 6,932,394 \$	2,130,315 \$	3,323,092	1,108,890 \$	587,898	\$ 8,870,659	\$ 3,229,002	24,658,079	\$ 12,524,093	\$ 5,552,134 \$	16,692,840 \$	4,234,818	\$ 2,781,218
Indirect Expenses	\$ -	\$ 5,590,166	\$ 6,388,761 \$	1,863,389 \$	3,460,579	798,595 \$	532,397	\$ 8,252,149	\$ 2,129,587	12,990,480	\$ (12,720,093)	\$ (5,552,134) \$	(16,717,840) \$	(4,234,818)	\$ (2,781,218)
Other Non-Operating Expenses	\$ 254,254	\$ - !	\$ 16,627 \$	- \$	16,627	- \$	-	\$ -:	\$ - :		\$ 196,000	\$ - \$	25,000 \$	-	\$ -
Total Expenses (B)	\$ 97,568,689	\$ 10,279,169	\$ 13,337,782 \$	3,993,704 \$	6,800,298	1,907,485 \$	1,120,295	\$ 17,122,809	\$ 5,358,589	37,648,559	\$ -	\$ - \$	- \$	-	\$ -
Change in Net Assets (=A-B)	\$ 2,253,436	\$ 69,943	\$ 654,933 \$	113,731 \$	475,498	(125,210) \$	2,852	\$ 1,031,702	\$ 652,407	377,582	\$ (1,000,000)	\$ - \$	- \$	-	\$ -
Fixed Asset Additions, excluding Right of Use Assets (C)	\$ 6,224,000	\$ 496,464	\$ 935,423 \$	255,905 \$	532,573	115,209 \$	43,473	\$ 1,661,328	\$ 814,891	1,368,735	\$ -	\$ - \$	- \$		\$ -
Financing Activity															
Loan or Financing Lease - Borrowing (-)	\$ (4,130,000)	\$ (549,620)	\$ (628,137) \$	(183,207) \$	(340,241)	(78,517) \$	(52,345)	\$ (811,343)	\$ (209,379)	(1,277,212)	s -	s - s	- \$	-	s -
Loan or Financing Lease - Principal Payments (+)	1,338,924	123,099	347,646	41,033	283,166	17,586	11,724	181,717	46,895	286,058				-	
Net Financing Activity (D)	\$ (2,791,076)			(142,174) \$							\$ -	\$ - \$	- \$		\$ -
Total Budget (=B+C)	\$ 101,001,613	\$ 10,349,112	\$ 13,992,714 \$	4,107,435 \$	7,275,796	1,961,763 \$	1,123,146	\$ 18,154,510	\$ 6,010,996	38,026,141	\$ -	\$ - \$	- \$	-	\$ -
Change in Working Capital (=A-B-C-D)	\$ (1,179,488)	\$ - :	\$ - \$	- \$	- 5	(179,488) \$	-	\$ -:	\$ - :		\$ (1,000,000)	\$ - \$	- \$	-	\$ -
FTES	236.88	19.74	22.56	6.58	12.22	2.82	1.88	29.14	7.52	45.87	19.74	16.92	31.21	12.22	8.46

Exhibit A - Application of NERC Section 215 Criteria

DISCUSSION OF HOW THE NERC MAJOR ACTIVITIES IN THE 2023 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. <u>Introduction</u>

This Exhibit discusses how the major activities in NERC's 2023 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 review of NERC conducted by the Federal Energy Regulatory Commission's (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. NERC submitted the written criteria to the Commission in a compliance filing dated February 21, 2013 in Docket No. FA11-21-000. The Commission approved the NERC written criteria, with modifications, in an order issued in that docket on April 18, 2013. The NERC written criteria as used in this Exhibit incorporate the modifications specified in the Compliance Order. Order.

II. Reliability Standards and Power Risk Issue Strategic Management 2023 Major Activities

The major activities of Reliability Standards and Power Risk Issue Strategic Management (PRISM) are described at pages 15-16 of the 2023 Business Plan and Budget. Reliability Standards and PRISM is comprised of the Reliability Standards group, which is focused specifically on the development and improvement of reliability standards; and the PRISM group, which supports Reliability Standards by providing technical support and develops, supports, and prioritizes the ERO Risk Registry. Reliability Standards carries out the ERO's responsibility to develop, adopt, obtain approval of, and modify as and when appropriate, mandatory Reliability Standards to assure the Bulk Electric System (BES) is planned, operated, maintained, and secured to minimize risks of cascading failures, avoid damages to major equipment, and limit interruptions. This group focuses on expanding a risk-based approach to its projects, to ensure that Reliability Standards are clear, timely, consider costs, effective in mitigating material risks, and do not unnecessarily burden industry with administrative requirements and/or detract from reliability or security. The major activity of PRISM is to leverage in-house expertise on Reliability Standards and standards development to implement cross-cutting efforts among NERC functions and the NERC standing and technical committees. The PRISM group provides in-house training on Reliability Standards and conducts statistical analyses concerning the results of standards to identify potential weaknesses, redundancies, and overall necessity.

¹⁷ 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.

¹⁸ 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.

¹⁹ North American Electric Reliability Corporation, Order on Compliance, 143 FERC ¶ 61,052 (2013) ("Compliance Order").

²⁰ 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.

The major activities for the Reliability Standards program for 2023 include developing a more nimble standard setting process that honors the important role of stakeholders in Reliability Standards development process for Reliability Standards development; addressing cyber security risk by continuing to enhance cyber security Reliability Standards; integrating and updating Reliability Standards to address new risks such as inverters, distributed energy resources, energy management, and fuel management; and addressing FERC directives, orders, or special reports.

The major activities of the PRISM group for 2023 include analyzing data on the Bulk Power System (BPS) to review generator data for trends, particularly to identify patterns for inverter-based resources that could affect system performance and reliability; continuing the efforts of the Energy Reliability Assessment Task Force (ERATF) to address additional items that could impact energy constrained resources; supporting the Reliability Issues Steering Committee (RISC) to implement a new risk prioritization method, hold the Leadership Summits, and release the ERO Reliability Risk Priorities reports; revising and enhancing the ERO Risk Registry; maintaining technical support for Reliability Standards by advising on new and existing projects; and owning the Reliability Risk Framework and any necessary updates.

The major activities of the Reliability Standards and PRISM 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.B: Is the activity necessary or appropriate for providing guidance and assistance to Regional Entities in carrying out Regional Reliability Standards development activities?
- 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?
- 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, (iii) industry personnel?
- IV: Is the activity one that was required or directed by a Commission order issued pursuant to §215? (Reliability Standards development projects are often initiated in response to directives in Commission orders).
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for the Reliability Standards Program are §300 and Appendix 3A.)
- 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?

III. <u>Compliance Assurance and Organization Registration and Certification and Compliance</u> Enforcement 2023 Major Activities

The major activities of Compliance Assurance and Organization Registration and Certification and Compliance Enforcement are described on pages 18 and 21 of the 2023 Business Plan and Budget.

Compliance Assurance works collaboratively with the Regional Entities to ensure effective implementation of risk-based compliance monitoring under the Compliance Monitoring and Enforcement Program (CMEP) across the ERO Enterprise. Compliance Assurance ensures that Regional Entities monitor registered entities for compliance according to their facts and circumstances, including the entity's inherent risks, evaluation of controls to mitigate inherent risks, and other factors, in order to allow for appropriate allocation of resources to issues that pose a higher level of risk to the reliability of the BPS.

Organization Registration (Registration) identifies and registers BPS users, owners, and operators that are responsible for performing specified reliability functions to which requirements of mandatory Reliability Standards are applicable. Organization Certification (Certification) ensures that an applicant to be a Reliability Coordinator (RC), Balancing Authority (BA), or Transmission Operator (TOP) has the tools, processes, training, and procedures to demonstrate its ability to meet the requirements of all the Reliability Standards applicable to the functions for which it is applying, thereby demonstrating the ability to become certified and then operational. The decision to certify changes to an already operating and certified RC, BA, or TOP is a collaborative decision between the affected Regional Entities and NERC.

The major activities of Compliance Assurance and Organization Registration and Certification for 2023 include: developing and implementing a plan to address facility ratings and demonstrate the importance of implementing strong internal controls; evaluating supply chain effectiveness and providing and analyzing metrics on compliance data to inform emerging risks and Registration activities; enhancing outreach to stakeholder and policy organizations and leveraging work of others; working to ensure successful roll-out of Align and the ERO Secure Evidence Locker (SEL); ensuring meaningful oversight activities; and continuing efforts to streamline risk-based Compliance Monitoring and Enforcement Activities.

Compliance Enforcement is responsible for overseeing enforcement processes, the application of Penalties or sanctions, and activities to mitigate and prevent recurrence of noncompliance with Reliability Standards. Compliance Enforcement works collaboratively with the Regional Entities to ensure consistent and effective implementation of the risk-based Compliance Monitoring and Enforcement Program. It also focuses on ensuring that the ERO Enterprise dedicates resources to the matters that pose the greatest risk to reliability. Compliance Enforcement monitors Regional Entities' enforcement processes and provides oversight of the BPS. The major activities of Compliance Enforcement for 2023 include continuing efforts to align risk determinations and using a risk-based approach to processing noncompliance; evaluating supply chain effectiveness and providing and analyzing metrics on enforcement data to inform emerging risks; enhancing outreach to stakeholder/policy groups and leveraging the work of others; working to ensure successful roll-out of Align and the ERO SEL; ensuring meaningful oversight activities; and continuing efforts to streamline risk-based CMEP activities.

The major activities of Compliance Assurance, Organization Registration and Certification, and Compliance Enforcement satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC 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. 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 BPS 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 RCs, TOPs, and BAs 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?
 - 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.
 - 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 BPS major events, off-normal occurrences and near miss events, and other BPS 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 §215? (FERC orders directed NERC to develop and implement a revised definition of "Bulk Electric System" and a procedure for requesting and receiving exceptions from the BES definition, and subsequently approved NERC's proposed revised BES 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 ROP 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 ROP 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?
- IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in the 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?

IV. Reliability Assessments and Performance Analysis 2023 Major Activities

The major activities of Reliability Assessments and Performance Analysis (RAPA) are described at pages 24–25 of the 2023 Business Plan and Budget. RAPA comprises four primary groups: (1) Reliability Assessments and Technical Committee; (2) Performance Analysis; (3) Advanced System Analytics and Modeling (ASAM); and (4) BPS Security and Grid Transformation.

The Reliability Assessments and Technical group, which includes Reliability Assessment staff and the NERC staff secretaries of the RSTC, carries out the ERO's statutory responsibility to conduct assessments of the reliability and adequacy of the BPS and associated emerging reliability risks that could impact the short, mid, and long-term planning horizons, as well as other reliability issues requiring in-depth analysis. Reliability Assessment activities directly address the risk priorities established by the RISC. Reliability Assessments and Technical Committee group relies on its own engineering and analysis expertise as well as Regional Entity and stakeholder resources. The RSTC and its subgroups provide the oversight, guidance, and leadership essential to enhancing BPS reliability by addressing areas of strategic focus efficiently and comprehensively, and ensuring technical accuracy.

Performance Analysis monitors the performance of and identifies risks to reliability of the BPS through analyzing data from industry and measuring historic trends. Analysis performed by Performance Analysis includes identifying potential risks of concern related to systems, equipment, entity and organizational performance that may indicate a need to develop improvements to reporting applications and new data analysis tools, or to create, revise, or retire reporting areas. Performance Analysis staff leads the ERO, technical committees, and stakeholder process to publish the *State of Reliability* (SOR) Report examining year-over-year performance indicators of the grid. Performance Analysis also develops the business requirements for all new reliability information data systems, specifically those required by NERC ROP 1600 data requests.

Advanced System Analytics and Modeling staff provide technical leadership and support in the areas of resource and demand balancing and system analysis and modeling, including technical support for the balancing (BAL) and modeling (MOD) Reliability Standards. ASAM staff also provides support for the development and improvement of long-term, sustainable interconnection-based power flow, dynamic, and load models that demonstrate the accuracy and fidelity necessary to reflect actual BES reliability performance and dynamic conditions. ASAM provides advanced statistical analysis functions to support the SOR Report and reliability assessments, the Frequency Response Annual Analysis (FRAA) report to the FERC, analytical review of Reliability Standard effectiveness, and various reports on an emergent basis.

The BPS Security and Grid Transformation department is responsible for driving key reliability and security initiatives working with internal and external stakeholders. Primary areas of focus include better integrating security concepts with conventional engineering activities as well as enabling new technologies in a reliable and secure manner. The group is responsible for key ERO work priorities, including inverter-based resource and distributed energy resource initiatives across the ERO Enterprise, and promoting concepts of cyber planning and grid transformation issues. The group coordinates a significant number of NERC's technical stakeholder groups under the RSTC, supports the Reliability Standards development process on engineering and security-related topics, provides technical expertise across the ERO Enterprise, and coordinates with the Electricity Information Sharing and Analysis Center (E-ISAC) on cross-departmental topics related to security risks.

The four RAPA groups work collaboratively with NERC stakeholders, particularly through the RSTC, to create a reliability strategy that is relevant, timely, and effective to address the most important reliability risks. Further, these groups work closely with other organizations to collaborate, coordinate, and leverage expertise, including but not limited to the U.S. Department of Energy, Electric Power Research Institute, Institute of Electrical and Electronics Engineers, Institute of Nuclear Power Operations, North American Transmission Forum, North American Generator Forum, Carnegie Mellon Industry Center, Power Systems Energy Research Center, Interstate Natural Gas Association of America, Natural Gas Supply Association, Canadian Electricity Association, and International Council on Large Electric Systems.

The major activities of RAPA for 2023 include (1) ensuring the reliable and secure integration of BPS-connected inverter-based resources and distributed energy resources, including the analysis of grid disturbances, development of technical guidance and educational materials, and collaborating with industry to ensure the Reliability Standards adequately address emerging risks in this area; (2) increasing understanding of impacts that the changing resource mix has on BPS reliability by collecting plant, event, connected energy storage, and performance data for photovoltaic and wind generation, combined with enhanced design data and event reporting for conventional generation; (3) enhancing reliability assessments to include assessments of energy availability and expanded probabilistic methods that can identify risks of energy shortfall for all assessment areas in long-term and seasonal time horizons; and (4) leveraging RAPA processes, tools, and products to improve BES resilience for wide-spread long-term extreme temperature events.

The major activities of RAPA satisfy the following criteria:

- I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC 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, 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? (2) Monitoring, event analysis and investigation of BPS major events, off-normal occurrences and near miss events?
- 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, 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 BPS based on such measurements; and/or identifying approaches to mitigating or eliminating such risks? (2) Monitoring, event analysis and investigation of BPS major events, off-normal occurrences, and near miss events?

- 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 BPS?
- 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 BPS 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 BPS 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 BPS?
- 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 BPS?
- V. Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for major activities of the RAPA program are §801-806 and §809-811.)
- 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?
- 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. <u>Situation Awareness 2023 Major Activities</u>

The major activities of Situation Awareness are described at page 28 of the 2023 Business Plan and Budget. The NERC Situation Awareness group and the Regional Entities monitor BPS conditions, significant occurrences and emerging risks, and threats across the 17 Reliability Coordinator regions in North America, to maintain an understanding of conditions and situations that could impact reliable operation. NERC's BPS Awareness Group supports development and publication of NERC Alerts and awareness

products, and facilitates information sharing among industry, Regional Entities and government during crisis situations and major system disturbances. Major activities of Situation Awareness for 2023 include (1) enhancing situation awareness tools to increase agility and efficiency, as well as visibility and understanding of the reliability or availability of natural gas and its interdependency with electric generation; (2) collaborating across the ERO Enterprise and with stakeholders to mitigate emerging and known risk by using all available tools, including the NERC Alerts process to issue Advisory (Level 1) Alerts on significant and emerging reliability and security-related topics as needed, and to facilitate the tracking of actions specified in Recommendation (Level 2) and Essential Action (Level 3) Alerts; (3) continue engaging with industry, the E-ISAC, government partners, and the ERO Enterprise on emerging risks to BPS reliability; and (4) engaging situation awareness subject-matter experts in support of the work of Reliability Standards, the E-ISAC, and the Reliability and Security Technical Committee (RSTC) to advance the security posture of the industry

The major activities of the Situation Awareness group 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 BPS major events, off-normal occurrences and near-miss events?
- 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 BPS in connection with BPS major events and off-normal occurrences, but not real-time operational control of the BPS?
- III.D: Is the activity necessary or appropriate for awareness of circumstances on the BPS 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 BPS?
- 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 BPS?
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for these major activities are ROP 810 and 1001.)

VI. Event Analysis 2023 Major Activities

The major activities of Event Analysis are described at pages 31 of the 2023 Business Plan and Budget. The Event Analysis program informs assessments of the reliability and adequacy of the BES through analysis of real-time operating events. This includes identifying potential issues of concern related to system, equipment, entity, human error, and organizational performance that may indicate a need to (1) develop remediation and/or risk reduction strategies and action plans, (2) revise, retire, or consider new Reliability Standards; and (3) shape aggregate reliability assurance planning. Event Analysis analyzes reportable events to identify and understand lessons learned, sequence of events, root and contributing

causes, risks to reliability, and potential mitigating actions. Event Analysis keeps the industry well informed of system events, emerging trends, event precursors, risk analysis, lessons learned, and recommended corrective and expected mitigation activities through various verbal and written communications and reports and cross-functional collaboration efforts.

Major activities for the Event Analysis group in 2023 include: enhancing event processing in support of developing a coherent system performance picture within the NERC ROP Section 800 system performance monitoring and reporting program; enhancing program data collection, organization, and manipulation capabilities; tuning alignment activities of cross-functional project collaboration through data analysis and disturbance reporting flexibility and agility; and reinforcing fundamental practices and advocacy of enhanced reliability practices through joint reliability partnership activities with stakeholders and the ERO Enterprise.

The major activities of the Event Analysis group 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 BPS 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 BPS 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 BPS major events, off-normal occurrences and near miss events, and other BPS monitoring activities?
- 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 BPS based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
- 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 BPS in connection with BPS major events and off-normal occurrences, but not real-time operational control of the BPS?
- III.D. Is the activity necessary or appropriate for awareness of circumstances on the BPS 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 BPS?
- 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 BPS?
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for these major activities are §807-808 and §810-811 and Appendix 8.)
- 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?
- 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. Electricity Information Sharing and Analysis Center 2023 Major Activities

The major activities of the Electricity Information Sharing and Analysis Center (E-ISAC) are described at pages 34–35 of the 2023 Business Plan and Budget. The E-ISAC provides its members and partners with resources to prepare for and reduce cyber and physical security threats to the North American electricity industry. The E-ISAC offers products and services that give timely, relevant, and actionable situational awareness and analysis to asset owners and operators as well as cross-sector and government partners. The central underpinning of the E-ISAC's strategic plan, developed in 2017, is for the E-ISAC to focus on providing timely and actionable information to industry regarding cyber and physical security threats and mitigation strategies. The strategic plan also recognizes the critical interdependencies between the E-ISAC, industry, U.S. and Canadian government agencies, and other stakeholders.

The E-ISAC oversees the Cybersecurity Risk Information Sharing Program (CRISP), a unique public-private initiative among the E-ISAC, the North American electric utility industry, the U.S. Department of Energy (DOE), and the U.S. Intelligence Community that delivers real-time, relevant, and actionable cyber security risk information to all E-ISAC member electricity asset owners and operators, including those from Canada and Mexico. Using passive information sharing devices on participant networks outside boundary firewalls, participant data is collected and then matched against known threat signatures, both classified and unclassified, to identify potential threats and provide participants with recommended mitigation steps. The Pacific Northwest National Laboratory, a U.S. DOE National Laboratory, operated by Battelle with oversight by the DOE, is the primary subcontractor to NERC for the deployment of the required technology, supporting infrastructure, analysis, and technical capabilities for CRISP.

The major activities of the E-ISAC for 2023 include: reviewing and curating intelligence applicable to the electricity sector; conducting threat hunts for malicious software on Information Technology and Operational Technology sensor platforms; expanding CRISP participation and technology modernization; and expanding membership and strategic relationships, including further collaboration with the natural gas sector, enhanced membership engagement, and establishing the vendor affiliate program.

The major activities of the E-ISAC 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 BPS based on such measurements; and/or identifying approaches to mitigating or eliminating such risks? (2) Monitoring, event analysis and investigation of BPS major events, off-normal occurrences and near-miss events?
- III.D: Is the activity necessary or appropriate for awareness of circumstances on the BPS 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 BPS.
- 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 BPS?
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for these major activities are §810 and 1003.)

VIII. Personnel Certification and Credential Maintenance 2023 Major Activities

NERC has placed the System Operator Certification and Credential Maintenance Program into a separate group overseen by the NERC Personnel Certification Governance Committee (PCGC), a NERC standing committee. These programs are funded through examination, renewal, and continuing education provider fees, and do not receive funding from FPA §215 statutory assessments. The PCGC oversees the budgets for these programs. For completeness, however, a summary of the major activities of the Personnel Certification and Credential Maintenance group is provided in this Exhibit.

The major activities of the Personnel Certification and Credential Maintenance group are described at page 40 of the 2023 Business Plan and Budget. This group promotes the reliability of the North American BPS by ensuring that employers have a workforce of system operators that meet minimum qualifications and maintain their required credentials to work in system control centers. NERC's System Operator Certification exam tests specific knowledge of job skills and Reliability Standards, and prepares operators to handle the BPS during normal and emergency operations. The PCGC's Exam Working Group (EWG), which consists of subject matter experts from all regions of North America, is responsible for doing an extensive job analysis survey of certified operators across the industry, which provides the basis for the exams. Certification is maintained by completing NERC approved Credential Maintenance Program courses and activities. The Credential Maintenance Working Group reports to the PCGC and is responsible for developing and maintaining the Credential Maintenance Program under the guidelines set by the PCGC.

The major activities for the Personnel Certification and Credential Maintenance Program for 2023 include: evaluating the results of the credential maintenance research project that was completed in 2022; seeking industry input on improvement opportunities for the Personnel Certification and Credential Maintenance

Program and development and implementing any changes; and conducting annual analysis of *System Operator Certification Program Manual* Appendix A topics (recognized operator training topics) and credential maintenance requirements.

The major activities of the Personnel Certification group 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.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 (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.
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provision for the major activities of the Personnel Certification Program is §900.)
- 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?

IX. Training and Education 2023 Major Activities

The major activities of Training and Education are described at page 43 of the 2023 Business Plan and Budget. The Training and Education group facilitates the learning and development of NERC and ERO Enterprise staff as well as BPS and industry participants, in accordance with NERC ROP 901, which acknowledges the need to acquire and sustain informed, knowledgeable and skilled personnel to assure the reliable operation of the North American BPS. The program oversees and coordinates learning activities and resources that support the acquisition and increase of knowledge and skills among stakeholders.

The major activities for the Training and Education group for 2023 include: leadership development, new hire orientation, and confidential information training; events, including GridEx and the annual ERO Enterprise Compliance Monitoring and Enforcement Staff Workshop; and developing training materials for the Align tool.

The major activities of Training and Education 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.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 BPS major events, offnormal occurrences and near miss events, and other BPS monitoring activities. (4) Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?

- 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 BPS?
- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for the major activities of the Training and Education are in §900.)
- 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.

X. Administrative Services 2023 Major Activities

NERC's Administrative Services Departments are General and Administrative, Legal and Regulatory, Business (Information) Technology (IT), Human Resources (HR) and Administration, and Finance and Accounting. The major activities of these departments are described at pages 46–48 of the 2023 Business Plan and Budget.

General and Administrative is responsible for the administration and general management of the organization and includes the Chief Executive Officer, Chief Engineer, and Chief Administrative Officer and support staff; External Affairs staff (legislative and regulatory, communications, and North American affairs activities); and Board of Trustees costs.

Legal and Regulatory provides legal support to the organization, including management and the NERC program areas. Legal support is provided in areas including antitrust, corporate, commercial, insurance, contracts, employment, real estate, copyright, tax, legislation, and other legal matters. Legal and regulatory support is also provided in connection with matters relating to the delegation agreements with Regional Entities. Legal and Regulatory also includes the Internal Audit and Corporate Risk Management functions.

Business Technology provides the technology and management needed for the organization to maintain daily operations and meet ERO statutory obligations, including applications and infrastructure leveraged by the ERO Enterprise and registered entities. Business Technology's Project Management Office provides project management skills and leadership for major business technology projects. The Business Technology Department focuses on five key areas: cyber security, NERC infrastructure support, the

Electricity Information Sharing and Analysis Center. ERO Enterprise application and infrastructure support, and ERO Enterprise new functionality. Business Technology manages NERC's overall Technology Strategy.

HR and Administration's activities include hiring, benefits administration, employee relations, performance and compensation management, training and development for leadership, management, and professional and administrative staff, facilities management of NERC's two offices, and meeting planning and coordination. HR and Administration is heavily involved in implementing NERC's People Strategy to enhance retention, engagement, and attraction of top talent to carry out the mission of the ERO Enterprise.

Finance and Accounting manages all finance and accounting functions of NERC, including accounts payable and receivable, assessment and CRISP billing, travel and expense reporting, budget management, financial reporting, corporate insurance program management, coordination of the annual financial statement audit and Form 990, property, sales, and use tax returns, and management of systems, policies, procedures and controls governing day-to-day practices, including procurement, expense reimbursement, and back office systems and procedures. Finance and Accounting is also responsible for preparation of the annual business plan and budget.

The major activities for the Administrative Programs for 2023 include: (1) continuing to enhance state outreach and engagement, including further developed outreach for ERO Enterprise assessments and reports, and expanding collaboration efforts with the National Association of Regulatory Utility Commissioners (NARUC) and government partners; (2) maturing internal assurance programs, including internal audit, risk management, and contingency planning; (3) enhancing cyber security to focus on prevention, detection, and mitigation and designing technology solutions for today's security and environment, supported by Information Technology (IT) policies, processes, and procedures that align with standard cyber frameworks and internal assurance programs; (4) supporting adaptable and sustainable technology, including technical roadmaps that accelerate adoption of cloud computing and quality assurance programs that improve disaster recovery, testing capability, and solution performance and security; and (5) increasing automation and controls across the HR and Finance and Accounting areas, and providing meaningful data to track metrics and measure efficiency.

As support functions for all of NERC's statutory programs, 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 ROP?
- II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the BPS 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 BPS in connection with BPS major events and off-normal occurrences, but not real-time operational control of the BPS?

- V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's ROP 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 ROP provisions for ERO Enterprise audits conducted by the Internal Audit group in Legal and Regulatory are §406, §506, and Appendix 4A, and for major activities of Finance and Accounting 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?
- 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 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:
 - 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 (BPS)²¹ based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
 - 2. Monitoring, event analysis and investigation of BPS 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?

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²¹ 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.

- 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 BPS 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 RCs, TOPS, and BAs 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?²²
 - 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:
 - 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 BPS based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
 - 2. Monitoring, event analysis and investigation of BPS 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.

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²² 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.

- 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 BPS major events, off-normal occurrences and near miss events, and other BPS 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 BPS disturbances?
- III. Is the activity necessary or appropriate for conducting and disseminating periodic assessments of the reliability of the BPS or monitoring the reliability of the BPS?
 - 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 BPS?
 - 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 BPS 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 BPS in connection with BPS major events and off-normal occurrences, but not real-time operational control of the BPS?
 - D. Is the activity necessary or appropriate for awareness of circumstances on the BPS 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 BPS?
 - 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 BPS?
 - G. Is the activity necessary or appropriate for data collection and analysis of information regarding BPS 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 ROP 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 BPS 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 BPS.
- C. Activities pertaining to facilities used in the local distribution of electricity.

Exhibit B – Capital Financing

The company secured a capital financing program in July 2020 for \$8.0M as a funding source for major software application development projects and hardware equipment that primarily benefit the ERO Enterprise. The \$8.0M non-revolving credit facility was available to finance certain capital expenditures made from July 2020 to December 2021, as approved by the Board of Trustees (Board) and the Federal Energy Regulatory Commission (FERC). NERC financed \$2.0M for ERO Secure Evidence Locker (SEL) project costs, borrowing \$1.3M in late 2020 and the remaining \$700k in 2021, with an interest rate of 2.5% and 3.2%, respectively. Borrowings under the credit facility for the ERO SEL are amortized over a five-year period and can be prepaid without penalty.

As discussed in the *Introduction and Executive Summary*, due to increased spending on capital software projects related to the 2023–2025 Technology Strategy, a portion of these projects is proposed to be financed with a new capital borrowing facility using a five-year loan amortization.²³ NERC has assumed borrowings of \$4.0M in 2023, \$4.0M in 2024, and \$2.5M in 2025, and has budgeted an average interest rate of 5.0%.

The tables below show projected year-end outstanding debt and the future annual payments for debt service.

	Year-End Outstanding Debt Balance									
	Prior Years		2022		2023		2024		2025	
	Actual		Projected		Budget		Projected		Projected	
Prior Years	\$ 1,773,292	\$	1,383,225	\$	969,301	\$	543,644	\$	105,848	
2022 Projection	-		-		-		-		-	
2023 Budgeted	-		-		3,700,000		2,956,000		2,176,000	
2024 Projected	-		-		-		3,700,000		2,956,000	
2025 Projected	-		-		-				2,315,000	
Total Outstanding Balance	\$ 1,773,292	\$	1,383,225	\$	4,669,301	\$	7,199,644	\$	7,552,848	

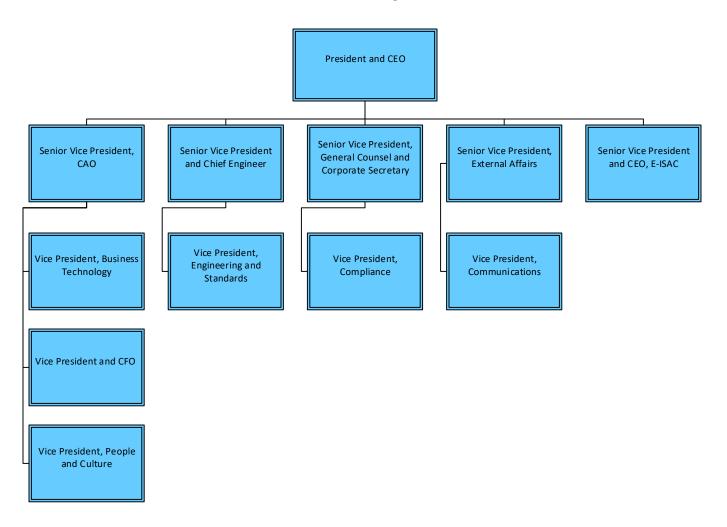
	Future Annual Payments for Debt Service									
		2022	2023	2024	2025					
		Projected	Budget	Projected	Projected					
Prior Years - Principal	\$	390,067	\$ 413,924	\$ 425,657	\$ 437,796					
2022 Projection		-	-	-	-					
2023 Budgeted		-	300,000	744,000	780,000					
2024 Projected		-	-	300,000	744,000					
2025 Projected		-	-	-	185,000					
Interest Expense		44,575	129,254	285,506	369,352					
Total Principal and Interest Costs	\$	434,642	\$ 843,178	\$ 1,755,163	\$ 2,516,148					

²³ NERC's current capital line of credit is expiring in February 2023 and will be renewed prior to that expiration in support of the proposed financing of capital software projects in 2023.



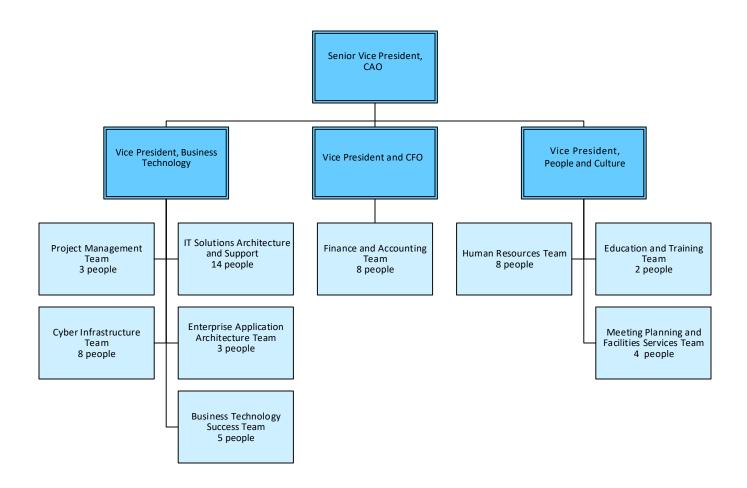
NERC Staff Organizational Chart – Budget 2023

Leadership Team



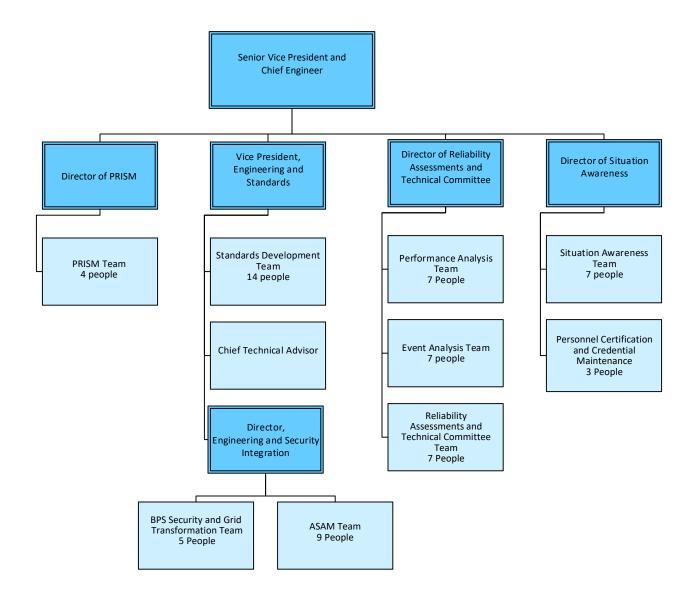


IT, Finance & Accounting, and HR & Administration



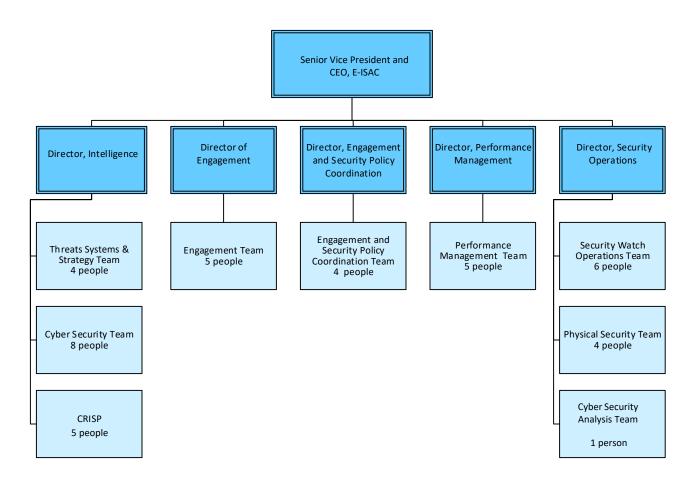


Reliability Standards and PRISM, RAPA, Event Analysis, Situation Awareness, and Personnel Certification and Credential Maintenance



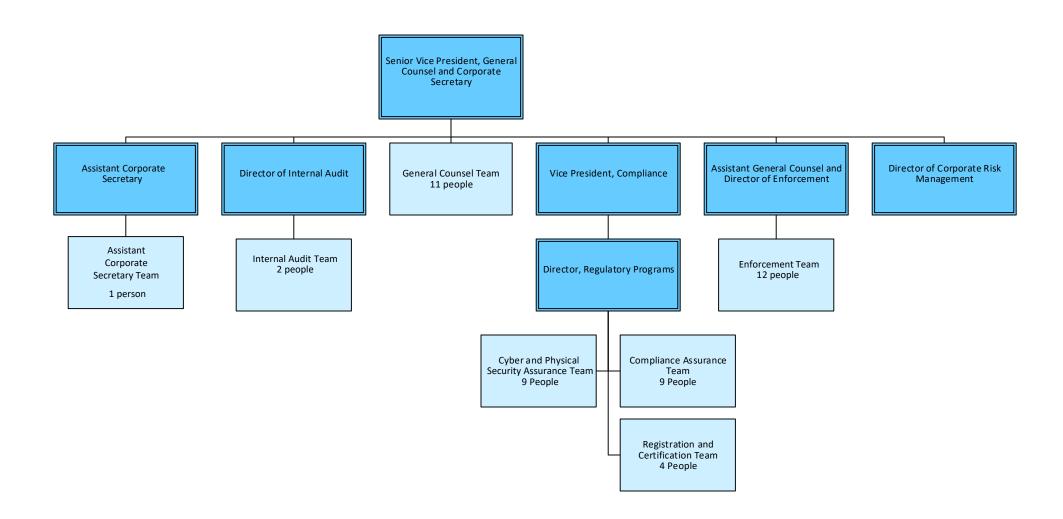


Electricity Information Sharing and Analysis Center





Compliance Assurance and Organization Registration and Certification, Compliance Enforcement, Legal and Regulatory, Internal Audit, and Corporate Risk Management





External Affairs

