

# Western Interconnection Regional Advisory Body

2025 Business Plan and Budget

## **TBD**

Under Consideration by

Appointed Members of the

Western Interconnection Regional

Advisory Body

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## Introduction

The Western Interconnection Regional Advisory Body (WIRAB) proposed budget for 2025 is \$831,561. This amount is \$69 (0.0%) higher than the amount in WIRAB's approved 2024 budget. Total proposed full-time equivalents (FTEs) for 2025 have remained flat at 2.60 FTEs. Major drivers of the flat budget are driven by proportionate increases and decreases in budgeted expenditures. Personnel expenses increased by 4.4% and indirect expenses decreased by 4.2%. WIRAB's total funding requirement is \$717,461. As shown in Table 1 below, this amount represents the total statutory expenses of \$831,561 less \$114,100 in statutory working capital requirement. WIRAB's proposed funding assessment is \$715,461, an increase of \$22,769 (3.3%) from the 2024 funding assessment. The modest assessment increase is necessary for the continuation of assessment stabilization and the prevention of major fluctuation in future budget periods. 2025 funding includes the use of working capital reserves in the amount of \$114,100. WIRAB proposes to allocate the funding assessment as follows: \$599,496 (83.8%) to the U.S. portion; \$102,821 (14.4%) to the Canadian portion; and \$13,144 (1.8%) to the Mexican portion of the Western Interconnection. Table 1 summarizes the WIRAB proposed budget for 2025.

Table 1. WIRAB Budget for 2025

| WIRAB - Total Resources<br>(in whole dollars)  | 20       | 25 Budget   |          | U.S.        | Canada        | Mexico       |
|--|----------|-------------|----------|-------------|---------------|--------------|
| Statutory FTEs*  |          | 2.60        |          |             |               |              |
| Non-statutory FTEs   |          |             |          |             |               |              |
| Total FTEs   |          | 2.60        |          |             |               |              |
| Statutory Expenses   | \$       | 831,561     |          |             |               |              |
| Non-Statutory Expenses   |          |             |          |             |               |              |
| Total Expenses   | \$       | 831,561     |          |             |               |              |
| Statutory Inc(Dec) in Fixed Assets   |          |             |          |             |               |              |
| Non-Statutory Inc(Dec) in Fixed Assets   |          |             |          |             |               |              |
| Total Inc(Dec) in Fixed Assets   | \$       | -           |          |             |               |              |
| Statutory Working Capital Requirement  | \$       | (114,100)   |          |             |               |              |
| Non-Statutory Working Capital Requirement  |          | 0           |          |             |               |              |
| Total Working Capital Requirement  | \$       | (114,100)   |          |             |               |              |
| Total Statutory Funding Requirement  | \$       | 717,461     |          |             |               |              |
| Total Non-Statutory Funding Requirement  | \$       | -           |          |             |               |              |
| Total Funding Requirement  | \$       | 717,461     |          |             |               |              |
| Statutory Funding Assessments <sup>1</sup>   | \$       | 715,461     | \$       | 599,496     | \$<br>102,821 | \$<br>13,144 |
| Non-Statutory Fees   | <b>—</b> | 202 224 405 |          | 740 157 105 | 126 046 102   | 16 220 100   |
| NEL**  |          | 383,331,495 |          | 740,157,105 | 126,946,192   | 16,228,198   |
| NEL%   |          | 100.00%     | <u> </u> | 83.8%       | 14.4%         | 1.8%         |
| *An FTE is defined as a full-time equivalent employee.  **NEL is defined as Net Energy for Load. |          |             |          |             |               |              |

<sup>&</sup>lt;sup>1</sup> The allocation of the statutory assessments was updated to reflect 2022 NEL data on July 26, 2023. Negotiations with Comisión Reguladora de Energía regarding the allocation to Mexico are on-going. Absent a contractual agreement, that also addresses a past-due assessment balance, being finalized before the 2025 budget is filed at FERC, a proposal is to reallocate that amount across the LSEs in the West. If the contract is not finalized before the 2025 WIRAB Business Plan and Budget is filed with FERC, Mexico will be removed from the assessment schedule for 2025.

## **Organizational Overview**

The Federal Energy Regulatory Commission (FERC or Commission) created WIRAB in April 2006, upon petition of ten Western Governors and in accordance with Section 215(j) of the Federal Power Act (FPA). The Governors invited all U.S. states, Canadian provinces, and Mexican jurisdictions with territory in the Western Interconnection to join WIRAB and to participate in WIRAB's activities as a regional advisory body charged with advising FERC, the North American Electric Reliability Corporation (NERC) and the Regional Entity (i.e., the Western Electricity Coordinating Council or WECC) on matters of electric grid reliability.

In July 2006, FERC issued an order granting the Governors' petition to establish WIRAB.<sup>2</sup> In its order, FERC determined that WIRAB should receive funding for its Section 215(j) activities and directed WIRAB to annually develop a budget and related information for submittal through the Electric Reliability Organization (ERO) budget approval process. The Commission instructed WIRAB to develop a budget in a form similar to that specified for regional entities as set forth in Order 672.<sup>3</sup> FERC also required WIRAB to identify the portion of its funding to be received from Canada and Mexico.

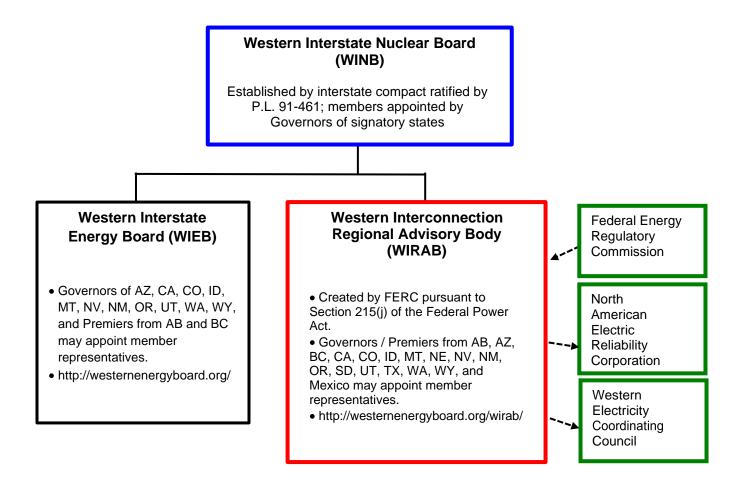
The Governors created WIRAB as a standing advisory committee to the Western Interstate Nuclear Board (WINB), which was formed pursuant to the Western Interstate Nuclear Compact, P.L. 91-461. WIRAB has the same status under the compact as the Western Interstate Energy Board (WIEB). Below is a chart that illustrates these organizational relationships.

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<sup>&</sup>lt;sup>2</sup> Order on Petition to Establish a Regional Advisory Body for the Western Interconnection, 116 FERC ¶ 61,061, Docket No. RR06-2-000, July 20, 2006.

<sup>&</sup>lt;sup>3</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Reliability Standards, Order 672, Docket RM05-30-000, Feb. 3, 2006, P. 228. "Each Regional Entity must submit its complete business plan, entire budget, and organizational chart to the ERO for it to submit to the Commission. The complete business plan and the entire budget will provide the Commission with necessary information about any non-statutory activities, the source of their funding, and whether the pursuit of such activities presents a conflict of interest for the Regional Entity. For a Cross-Border Regional Entity, this information will also inform the Commission as to what portion of the budget is expended upon activities within the United States."

Figure 1. Organizational Relationships



## **Membership and Governance**

All U.S. states with territory in the Western Interconnection (AZ, CA, CO, ID, MT, NE, NV, NM, OR, SD, TX, UT, WA, WY), the Canadian provinces of Alberta and British Columbia, and the Mexican state of Baja California are eligible to appoint members to WIRAB. Member representatives of WIRAB are appointees of the respective Governors and Premiers, or representative-designated alternates. Below is the list of current WIRAB member representatives (as of June 1, 2024):

Figure 2. WIRAB Membership List

| State/Province   | Name                 | Title/Agency   | WIRAB Leadership |
|------------------|----------------------|--|------------------|
| Alberta          | Betsy Li Alward      | Director, Generation, Transmission and Markets Policy, Utilities,<br>Alberta Affordability and Utilities |                  |
| Arizona          | Lea Márquez Peterson | Commissioner, Arizona Corporation Commission   | Vice-Chair       |
| British Columbia | Chris Gilmore        | Executive Director, Electricity Policy Branch, Ministry of Energy,<br>Mines and Low Carbon Innovation    |                  |
| California       | Siva Gunda           | Vice Chair, California Energy Commission   |                  |
| Colorado         | James Lester         | Senior Policy Lead on Transmission, Climate and Energy, Colorado<br>Energy Office                        |                  |
| Idaho            | Richard Stover       | Administrator, Idaho Governor's Office of Energy and Mineral<br>Resources                                |                  |
| Mexico           | Vacant               | -  |                  |
| Montana          | Michael Freeman      | Natural Resources Policy Advisor, Montana Office of the Governor   |                  |
| Nebraska         | Tim Texel            | Executive Director, Nebraska Power Review Board  |                  |
| Nevada           | Dwayne McClinton     | Director, Nevada Governor's Office of Energy   |                  |
| New Mexico       | James Ellison        | Commissioner, New Mexico Public Regulation Commission  |                  |
| Oregon           | Janine Benner        | Director, Oregon Dept of Energy  |                  |
| South Dakota     | Greg Rislov          | Commission Advisor, South Dakota Public Utility Commission   |                  |
| Texas            | Vacant               |  |                  |
| Utah             | Greg Todd            | Executive Director, Utah Governor's Office of Energy Development   |                  |
| Washington       | Elizabeth Osborne    | Senior Energy Policy Analyst, Washington State Energy Office   |                  |
| Wyoming          | Mary Throne          | Chairman, Wyoming Public Service Commission  | Chair            |

WIRAB holds two in-person meetings each year, usually in Spring and Fall. These meetings are open to the public. WIRAB also holds monthly conference calls to discuss current and emerging issues and hosts periodic webinars with presentations from subject matter experts on key electric grid reliability topics.

## **Statutory Functional Scope**

FERC established WIRAB as a Regional Advisory Body under section 215(j) of the FPA. The language in Section 215(j) specifically provides for WIRAB's authority to advise FERC, NERC, and WECC on whether reliability standards, budgets and fees, governance, compliance, assessments, strategic direction, and other activities conducted pursuant to Section 215 are just, reasonable, not unduly discriminatory, or preferential, and in the public interest.

WIRAB's advice to FERC, NERC, and WECC can be grouped into four categories that are appropriately funded under Section 215 of the FPA, including:

- 1. Governance and Strategic Planning;
- 2. Emerging Trends and System Risks;
- 3. Periodic Reliability Assessments; and
- 4. Reliability Standards and Proactive Enforcement.

WIRAB's activities in each of these categories are described in Section A – Statutory Activities.

## **2025 Strategic Initiatives**

The Western Interconnection is vital to the region's economy and its people. It serves a population of nearly 90 million people, and they are asking for more of the electric system to meet the demands of everyday life. Although energy efficiency has reduced the demand of traditional electricity uses, previously non-electrified services, such as transportation, and growing services, such as data centers, are creating new dynamic loads on the system. Traditionally, supply and demand were fairly predictable. Still, demand is growing and becoming more variable, all with greater expectations for reliable service.

The energy generation mix in the Western Interconnection that is used to meet these demands continues to evolve, driven by environmental policies, market dynamics, new technologies, and aging infrastructure. Inverter-based resources like solar photovoltaics are experiencing significant growth, particularly in regions like California and the Desert Southwest.

Plus, utility-scale wind continues to be developed where wind resources are most available, likely requiring the addition of long transmission lines to serve population centers. Additionally, the procurement of energy storage solutions, such as batteries, is becoming increasingly vital to support the integration of weather-dependent renewable energy resources. Traditional thermal generation, such as coal, continues to retire, shifting the dynamics of the Western Interconnection and requiring new approaches to ensure system reliability.

The Western Interconnection faces ongoing challenges from extreme natural events, which require careful consideration when managing critical infrastructure. From wildfires and droughts to heatwaves and extreme cold, these environmental factors complicate utility planning and operations. Additionally, energy policymakers and regulators are increasingly factoring environmental and climate considerations into grid infrastructure decisions, highlighting the critical need to prioritize grid reliability as they adapt to meet current and future energy demands.

Transmission planning and development are critical to ensuring a reliable and resilient electric grid in the West. As the generation resource mix continues to change and the grid increases in complexity, adequate transmission infrastructure is necessary to deliver power to where it is needed most, maintain system stability, and reduce congestion. Planning and developing new transmission lines and upgrades to existing infrastructure will be essential to support the integration of new renewable energy resources and ensure grid reliability throughout the region.

Grid modernization efforts present both opportunities and challenges for the Western grid. The growing presence of rooftop solar emphasizes the need for enhanced coordination between Bulk Power System and distribution system operators. Moreover, integrating new technologies designed to increase efficiency and reliability may introduce new complexities and vulnerabilities. Further research, development, and deployment of innovative technologies and operational tools are imperative to achieve improved reliability. It is also imperative to ensure the cyber and physical security of critical grid infrastructure across the Western Interconnection.

Furthermore, the evolving structure of Western power markets introduces both challenges and opportunities for reliability. Market reforms are poised to bring significant changes to system operations, including transmission scheduling, congestion management, and reliability coordination. Additionally, regulatory frameworks aimed at ensuring resource adequacy across

extensive regions of the West are progressing, reshaping how entities demonstrate their capacity to meet customer demands consistently throughout the region.

Considering these challenges, WIRAB has identified strategic initiatives for 2025 that encourage WECC to take the lead in fostering a reliable electric grid in the Western Interconnection. By focusing on these strategic initiatives, WIRAB aims to strengthen the reliability and security of the Western Interconnection, ensuring that WECC and its stakeholders remain well-equipped to navigate the evolving energy landscape in the West.

# Initiative 1: Advise WECC to work collaboratively with the Western Power Pool and Western stakeholders in the effort to develop an investment grade transmission plan that effectively improves reliability in the Western Interconnection.

Current transmission planning frameworks in the West lack adequate solutions to support the evolving energy grid, which faces challenges such as a changing resource mix, extreme weather impacts, and projected industrial and electrification load growth. Regional transmission planning is currently managed by NorthernGrid, WestConnect, and the CAISO to meet FERC Orders 890 and 1000 compliance for jurisdictional entities. Although these processes comply with FERC regulations, they have not led to sufficient transmission solutions and hinder the broader West from developing inter-regional transmission. To meet future grid needs, transmission planning must be more holistic and coordinated to optimize plans for a wider range of requirements.

The Western Transmission Expansion Coalition (WestTEC) is exploring a new approach for West-wide transmission planning, aiming to create an actionable transmission plan that addresses regional and inter-regional needs. This plan will be based on thorough analysis, including economic studies (production cost modeling), physical operations of the system that comply with NERC Reliability Standards, and operational flexibility (inclusive of full contingency analysis). The goal is to ensure the plan can be implemented with confidence.

WECC plays a critical role in this effort by providing data and models for the study. WECC's expertise in reliability assessments and conducting round trip analysis between production cost modeling and power flow modeling is essential for evaluating the reliability of potential future transmission plans. WECC also plans to allocate funds from Peak Reliability's dissolution to support the technical assessment. It is important that the WestTEC initiative adheres

to principles of transparency, independence, and inclusivity, while considering interconnectionwide transmission planning perspectives. WIRAB emphasizes the importance of WECC's continued involvement in decision-making to uphold these objectives and recommends regular reporting to the WECC Board and stakeholders.

Western States and Provinces are directly involved in the WestTEC effort through the Committee on Regional Electric Power Cooperation (CREPC). Still, WIRAB emphasizes the need for WECC to keep stakeholders and the WECC Board informed about the progress of this initiative. WECC should seek WIRAB's advice on how to engage most effectively in the initiative to adequately address reliability concerns from states and provinces within the Western Interconnection.

## The goals of this initiative include:

- Conducting an interconnection-wide assessment of the potential need for new transmission capacity to facilitate the development of transmission and generation resources that meet reliability expectations.
- Ensuring the assessment process is transparent, independent, and inclusive, with consideration for interconnection-wide transmission planning perspectives.
- Disseminating the transmission plan to relevant stakeholders in the Western Interconnection.

#### To achieve these goals, WIRAB staff will:

- Monitor and participate in the WestTEC effort.
- Encourage WECC to offer its services in providing an interconnection-wide assessment of plans and development of transmission.
- Engage with state and provincial regulators and policymakers to guide WECC's involvement in WestTEC to ensure transparency, independence, and inclusivity.
- Invite WECC to share its perspective on the WestTEC effort with regulators and policymakers across the Western Interconnection.

In conclusion, improving transmission planning in the Western Interconnection is crucial for WECC and other entities to plan, operate, and maintain a reliable, affordable, and sustainable

electric grid for the region.

Initiative 2: Advise WECC to work collaboratively with Western regulators and stakeholders to address and proactively mitigate risks associated with the uncoordinated interconnection of inverter-based resources in the Western Interconnection.

The rapid expansion of renewable IBRs, such as wind, solar photovoltaics, and battery electric storage, is reshaping the grid and raising concerns about its reliability as traditional thermal synchronous generation is phased out. While some fossil fuel-based generation retires, a notable resource base of synchronous generation (e.g., hydro, natural gas) will remain in the West. However, the surge in renewable IBRs will push the instantaneous penetration of IBRs higher in the coming years.

It is crucial to recognize that the rise of IBRs significantly increases instantaneous penetration levels, representing the percentage of demand served by IBRs at any given moment. This rise occurs much earlier than the increase in energy levels served by IBRs, which refers to the percentage of energy delivered to customers over a year. For instance, a region may experience moments where instantaneous IBR levels reach over 80% of generating capacity, even though annual energy levels might only account for 15-20% of total energy served. Grid planners, engineers, and operators face the challenge of ensuring the reliability of a vastly more complex and variable grid.

NERC and WECC have repeatedly underscored the risks posed by abnormal IBR performance, inaccurate modeling, unreliable studies, poor commissioning practices, and the need for proactive risk mitigation. The frequency and scale of IBR-related grid events have increased rapidly, and immediate action is needed. NERC has indicated that current industry measures are insufficient to address these risks, and FERC has instructed NERC, through Order 901, to develop new or modified Reliability Standards to address gaps related to IBRs. However, these directives address only known past issues and do not anticipate future risks posed by the significant changes in grid dynamics.

In 2024, WIRAB commissioned an assessment of IBR-related risks and potential gaps in the Western Interconnection. This work aims to identify proactive measures that industry stakeholders, including utilities, system operators, WECC, state regulators, and policymakers, can take. The assessment explores the possibility of adopting region-specific reliability standards or requirements that support the West's rapid grid transformation. The goal is to inform WIRAB Advice by identifying tangible actions to ensure reliable IBR interconnection, provide guidance for utilities and system operators, and clarify the roles of regulatory bodies in risk mitigation in the Western Interconnection.

The initiative's goals are as follows:

- Implementing WIRAB's recommendations from the IBR-related risks and gap analysis project.
- Updating interconnection requirements to ensure resources consistently and effectively connect to the bulk power system.
- Educating a broad group of stakeholders in the Western Interconnection on IBR-related risks and steps to mitigate them.

To achieve these goals, WIRAB staff will:

- Encourage WECC to collaborate with industry stakeholders to move forward the recommendations from the WIRAB IBR-related risks and gap analysis project.
- Work with WECC, NERC, and industry stakeholders to promote the adoption of performance requirements in interconnection agreements.
- Partner with WECC to educate state and provincial regulators and policymakers about the importance of supporting the stability and reliability of the Western Interconnection as IBRs are interconnected.

In conclusion, through proactive collaboration, WECC can effectively mitigate risks associated with the uncoordinated interconnection of inverter-based resources, ensuring the stability and reliability of the Western Interconnection.

Initiative 3: Advise WECC regarding a process for ongoing assessments and prudent upgrades for inter-regional transfer capabilities in the Western Interconnection to ensure reliable power flow when the system is stressed.

NERC is leading the Interregional Transfer Capability Study (ITCS), which assesses the

reliability of power transfers between regions within North America's interconnected transmission system. Strong and flexible transmission infrastructure is essential for dependable power supply and delivery, especially given recent changes in resource mix and extreme weather conditions.

Transmission planners currently assess connections between planning areas to evaluate maximum transfer capability and potential constraints. However, there is no uniform standard for transfer capability, which varies across the country depending on local needs and investments. The NERC ITCS, conducted in consultation with six Regional Entities, including WECC, and transmission utilities, focuses on three primary goals: evaluating current power transfer capability, recommending prudent additions for future reliability, and providing recommendations to maintain current total transfer capability.

The study, mandated by the Fiscal Responsibility Act of 2023, will be submitted to FERC by December 2, 2024, followed by a public comment period. FERC will then report to Congress with recommendations for any statutory changes, as necessary.

Once the NERC ITCS is complete, ongoing assessment of power transfer capability will be needed to adapt to evolving conditions in the Western Interconnection. Additionally, the ITCS will suggest prudent additions to support future transfer capabilities and upgrades to inter-regional transfer capabilities for future reliability and resilience. Engagement with Western states and provinces is crucial to conduct a cost-benefit analysis of the recommendations in the region to ensure necessary upgrades for maintaining reliability are implemented.

## The initiative's goals include:

- Ensuring maintenance and improvement of total transfer capabilities through continuous assessment and proactive management.
- Evaluating recommended prudent additions or upgrades to inter-regional transfer capabilities to support future reliability and resilience in the Western Interconnection.
- Disseminating ITCS results to relevant stakeholders in the Western Interconnection.

To achieve these goals, WIRAB staff will:

• Review the final ITCS report and engage in the FERC comment process.

- Monitor and assess ongoing changes in the Western Interconnection to identify emerging challenges or opportunities related to inter-regional transfer capabilities.
- Advocate for continued evaluation of transfer capabilities and infrastructure improvements to support a reliable and resilient electric grid across the region.

In conclusion, the ongoing assessment and prudent enhancement of inter-regional transfer capabilities are essential for ensuring a reliable and resilient electric grid in the Western Interconnection. This initiative will help maintain the reliability and stability of the power system, ultimately supporting the region's energy needs for the future.

Initiative 4: Advise WECC to conduct a systematic review of recent extreme weather events that have tested the grid, focusing on the challenges of maintaining grid reliability during increased demand, unexpected outages, system stress, and near-miss incidents in the Western Interconnection.

Extreme natural events such as droughts, heat waves, cold snaps, and wildfires pose significant risks to the Western Interconnection. The region heavily depends on hydroelectric power, which comprises about 27% of its total capacity, and weather-dependent resources like wind and solar, which contribute another 18%. The performance of these resources is closely linked to precipitation and weather patterns and directly affects system reliability. Severe droughts, heat waves, cold snaps, and wildfires can quickly disrupt grid reliability, as evidenced by events such as the 2023 summer congestion in the Pacific Northwest and the Winter 2024 deep cold snap. WIRAB has hosted discussions with policymakers and industry experts on these recent power system events. These events serve as case studies to share insights on maintaining grid reliability amidst increased demand, unexpected outages, and system stress.

WECC's Event Analysis and Situational Awareness processes enhance bulk power system reliability in the Western Interconnection by providing insight and guidance through identifying and sharing valuable information with owners, operators, and users of the bulk power system. The process involves monitoring BPS conditions, significant events, and emerging threats to maintain a clear understanding of potential impacts on reliable operations.

Given that extreme natural events have frequently occurred over the past few years, WECC should conduct a systematic review of recent extreme weather events that have tested the grid,

aiming to identify commonalities and lessons to be learned. Sharing these lessons with policymakers and regulators is essential for raising awareness and improving state energy policy. As the regional entity, WECC should also share lessons from its Event Analysis and Situational Awareness Program in public briefings with Western policymakers and regulators to increase awareness of recent events and inform future public policy.

The goals of this initiative include:

- Conducting a systematic review of recent extreme weather events that have tested the grid.
- Providing periodic public briefings with Western policymakers and regulators to share lessons learned from the Event Analysis and Situational Awareness Program.
- Raising awareness among Western policymakers and regulators of the causes of system events and actions to prevent recurrence.

To achieve these goals, WIRAB staff will:

- Encourage the WECC Reliability Risk Committee and WECC's Event Analysis team to conduct a systematic review of recent extreme weather events that have tested the grid.
- Collaborate with WECC to identify potential power system events for discussion and frame information in a way that policymakers and stakeholders can understand.
- Work with WECC to share information and lessons learned with Western policymakers and stakeholders.

In conclusion, a systematic review of recent extreme weather events will be essential for enhancing grid reliability and informing future public policy. These efforts can strengthen the resilience and preparedness of the Western Interconnection to navigate challenges posed by extreme weather events.

Initiative 5: Advise WECC to assess the reliability implications of innovative grid solutions used to maximize the potential of the existing transmission system as utilities modernize the grid in the Western Interconnection.

One of the major challenges in integrating new resources into the Western Interconnection's electric system is the limited transmission capacity to support these resources and meet growing demand. Transmission lines in the West span vast distances to connect remote generation sites to urban centers. While new transmission projects can take decades to develop due to planning, cost allocation, siting, and permitting challenges, emerging technologies may offer solutions to optimize existing transmission lines within current rights-of-way.

According to the U.S. Department of Energy, grid-enhancing technologies (GETs) such as sensors, power flow control devices, and analytical tools can increase the transmission of electricity across existing infrastructure, improve electricity delivery efficiency using current transmission infrastructure and can provide cost savings and expedited solutions compared to constructing new power lines. Additionally, advancements in materials can make it possible for existing power lines to have more capacity while maintaining better performance at higher operating temperatures. However, the adoption of GETs, advanced conductors, and other technologies by transmission organizations and system operators has been limited due to a lack of available data and rigorous, independent testing. Utility decision-makers often rely on vendor assurances to address concerns about costs, real-world economic benefits, deployment options, usage characteristics, and challenges related to integrating new technologies with existing systems and market practices.

WECC should study the impacts of innovative grid solutions such as dynamic line ratings, advanced conductors, or HVDC systems to assess how entities can modernize the transmission system in the Western Interconnection. Through reliability assessments of different grid solutions, WECC can reveal the true potential of the western transmission system and identify potential reliability challenges associated with implementing these technologies on a larger scale.

## The goals of this initiative include:

- Conducting reliability assessments involving the deployment of innovative grid solutions such
  as dynamic line ratings, advanced conductors, or HVDC systems to understand the reliability
  impacts of widespread adoption of these types of solutions.
- Evaluating assessments to understand how new technologies can support future reliability and resilience in the Western Interconnection.

• Disseminating assessment results to relevant stakeholders in the Western Interconnection.

To achieve these goals, WIRAB staff will:

- Encourage the WECC Reliability Assessment Committee and WECC's Study Program to conduct reliability assessments under different scenarios that deploy innovative grid solutions.
- Collaborate with WECC and stakeholders to identify which technologies should be considered and how to structure the study.
- Work with WECC to share the results with Western policymakers and stakeholders.

In conclusion, assessing the reliability implications of innovative grid solutions offers the potential to maximize the efficiency of the existing transmission system while ensuring reliability and resilience in the Western Interconnection. By sharing insights from these assessments, WECC can help guide policymakers and stakeholders toward informed decisions that support a reliable, modernized electric grid.

## **2025 Budget and Assessment Impacts**

The WIRAB proposed budget for 2025 is \$831,561. This amount is \$69 (0.0%) higher than the amount in WIRAB's approved budget for 2024. Total proposed FTEs for 2025 are 2.60, which remains flat from 2024. The budget continues to maintain 2.0 FTEs dedicated to WIRAB activities with support from four other technical staff. WIRAB's total funding requirement is \$717,461. WIRAB's proposed funding assessment is \$715,461, a \$22,769 (3.3%) increase over the 2024 assessment. The modest assessment increase is necessary for the continuation of assessment stabilization and the prevention of major fluctuations in future budget periods. 2025 funding includes the use of working capital reserves in the amount of \$114,100

## **Personnel and Indirect Expenses**

Direct labor expenses (exclusive of indirect expenses) increased from \$269,892 in the 2024 Budget to \$281,826 (4.4%) in the 2025 Budget. This is attributable to standard annual cost of living and merit increases. WIRAB uses a single rate method for indirect expenses. Indirect expenses include office expenses, medical and retirement expenses as well as holiday, vacation, and sick leave for WIRAB staff. The indirect rate is the ratio between overhead expenses to direct labor allocated to WIRAB. The indirect rate decreases from 103.6% of direct labor costs in the 2024 Budget to 95.0% in the 2025 Budget. Table 2 shows personnel and indirect expenses per FTE for the approved 2024 Budget and the proposed 2025 Budget.

Table 2. Personnel and Indirect Expense Analysis, 2024-2025

| WIRAB - Personnel and Indirect Expense Analysis 2024-2025          |            |           |           |    |          |       |  |  |  |  |  |  |
|--|------------|-----------|-----------|----|----------|-------|--|--|--|--|--|--|
| STATUTORY  |            |           |           |    |          |       |  |  |  |  |  |  |
| Variance<br>Budget Projection Budget 2025 v<br>2024 2024 2025 2024 |            |           |           |    |          |       |  |  |  |  |  |  |
| Personnel  |            |           |           |    |          |       |  |  |  |  |  |  |
| Direct Labor   | \$269,892  | \$269,892 | \$281,826 | \$ | 11,934   | 4.4%  |  |  |  |  |  |  |
| FTEs   | 2.60       | 2.60      | 2.60      |    | -        | 0.0%  |  |  |  |  |  |  |
| Cost per FTE   | \$103,805  | \$103,805 | \$108,395 | \$ | 4,590    | 4.4%  |  |  |  |  |  |  |
| Indirect   |            |           |           |    |          |       |  |  |  |  |  |  |
| Indirect Rate  | 103.6%     | 95.1%     | 95.0%     |    |          | -8.3% |  |  |  |  |  |  |
| Indirect Expense   | \$279,600  | \$256,532 | \$267,735 | \$ | (11,865) | -4.2% |  |  |  |  |  |  |
| FTEs   | 2.60       | 2.60      | 2.60      |    | -        | 0.0%  |  |  |  |  |  |  |
| Cost per FTE   | \$107,538  | \$ 98,666 | \$102,975 | \$ | (4,564)  | -4.2% |  |  |  |  |  |  |
| Average Total Co   | st per FTE |           | \$105,685 |    |          |       |  |  |  |  |  |  |

### **Meeting Expense**

Meeting costs remained flat at \$101,500 in the proposed 2025 budget. WIRAB will hold two major in-person meetings per year that include participation by state/provincial agencies with electric power responsibilities in the Western Interconnection. Wherever feasible, WIRAB meetings will be coordinated with other meetings of the Western states and provinces. Webinars on topics of concern will continue to be utilized between in-person meetings. WIRAB also conducts monthly conference calls to update members on current activities and to develop positions on reliability issues in the Western Interconnection.

## **Travel Expense**

Travel costs remain flat at \$80,500. WIRAB members' travel to biannual meetings and reliability conferences accounts for \$42,400. WIRAB staff travel to attend meetings of WIRAB, WECC and NERC accounts for \$38,100. Hotel and travel costs are based on experience from previous years and in consideration of continued economic conditions.

#### **Consultants and Contracts**

The 2024 budget includes \$100,000 in contract funding for technical expertise on issues related to improved grid operating practices, reliability standards and compliance; the same amount is budgeted for 2025. This expertise will assist WIRAB in preparing and providing technically-sound advice to be submitted to the FERC, NERC, and WECC as authorized under Section 215(j).

Table 3. Budget Comparison 2024 to 2025

|   |     |                |    |                   |  | d 2025 Bud |           |    |                |  |           |           |
|---|-----|----------------|----|-------------------|--|------------|-----------|----|----------------|--|-----------|-----------|
|   |     |                |    | STATUTO           |  |            |           |    |                |  | , .       |           |
|   |     | 2024<br>Budget | D  | 2024<br>rojection | Variance<br>2024 Projection<br>v 2024 Budget |            | % Change  |    | 2025<br>Budget | Variance<br>2025 Budget<br>v 2024 Budget |           | % Change  |
| Funding                                       |     | buuget         | P  | rojection         | OV   | er(Under)  | 76 Change |    | buuget         | OV                                       | er(Under) | 70 Change |
| WIRAB Funding                                 |     |                |    |                   |  |            |           |    |                |  |           |           |
| Assessments                                   | \$  | 692,692        | \$ | 692,692           | \$   | -          | 0.0%      | \$ | 715,461        | \$                                       | 22,769    | 3.3%      |
| Penalty Sanctions                             | _   |                | _  |                   | _  |            |           | _  | 715 461        | _  | - 22.700  | 2.20/     |
| Total WIRAB Funding                           | \$  | 692,692        | \$ | 692,692           | \$   | -          | 0.0%      | \$ | 715,461        | \$                                       | 22,769    | 3.3%      |
| Membership Dues                               |     | -              |    | -                 |  | -          |           |    | -              |  | -         |           |
| Interest                                      |     | 1,000          |    | 2,000             | \$   | 1,000      | 100.0%    |    | 2,000          | \$                                       | 1,000     | 100.0%    |
| Miscellaneous                                 |     | -              |    | -                 |  | -          |           |    | -              | _  | -         |           |
| Total Funding (A)                             | \$_ | 693,692        | \$ | 694,692           | \$   | 1,000      | 0.1%      | \$ | 717,461        | \$                                       | 23,769    | 3.4%      |
| Expenses                                      |     |                |    |                   |  |            |           |    |                |  |           |           |
| Personnel Expenses                            |     |                |    |                   |  |            |           |    |                |  |           |           |
| Direct Labor                                  |     | 269,892        |    | 269,892           |  | -          | 0.0%      |    | 281,826        | \$                                       | 11,934    | 4.4%      |
| Payroll Taxes                                 |     |                |    |                   |  | -          |           |    |                |  | -         |           |
| Benefits                                      |     |                |    |                   |  | -          |           |    |                |  | -         |           |
| Retirement Costs                              |     |                |    |                   |  | -          |           |    |                |  | -         |           |
| Total Personnel Expenses                      | \$_ | 269,892        | \$ | 269,892           | \$   |            | 0.0%      | \$ | 281,826        | \$_                                      | 11,934    | 4.4%      |
| Meeting Expenses                              |     |                |    |                   |  |            |           |    |                |  |           |           |
| WIRAB Meetings                                | \$  | 101,500        | \$ | 98,000            | \$   | (3,500)    | -3.4%     | \$ | 101,500        | \$                                       | -         | 0.0%      |
| State Travel                                  |     | 42,400         |    | 42,400            | \$   | -          | 0.0%      |    | 42,400         | \$                                       | -         | 0.0%      |
| Staff Travel                                  |     | 38,100         |    | 35,000            | \$   | (3,100)    | -8.1%     |    | 38,100         | \$                                       | -         | 0.0%      |
| Total Meeting Expenses                        | \$  | 182,000        | \$ | 175,400           | \$<br><b>\$</b>                              | (6,600)    | -3.6%     | \$ | 182,000        | \$<br><b>\$</b>                          |           | 0.0%      |
| Operating Expenses                            |     |                |    |                   |  |            |           |    |                |  |           |           |
| Consultants & Contracts                       | \$  | 100,000        | \$ | 100,000           | \$   | _          | 0.0%      | \$ | 100,000        | \$                                       | _         | 0.0%      |
| Office Rent                                   | •   | -              | •  | -                 | •  | -          | -         | •  | -              | •  | -         | -         |
| Office Costs                                  |     | -              |    | -                 |  | -          | -         |    | -              |  | -         | -         |
| <b>Professional Services</b>                  |     | -              |    | -                 |  | -          | -         |    | -              |  | -         | -         |
| Miscellaneous                                 |     | -              |    | -                 |  | -          | -         |    | -              |  | -         | -         |
| Depreciation                                  | _   | - 100 000      | _  | 100.000           | _  | -          | - 0.00/   | _  | 100.000        | _  | -         | - 0.00/   |
| Total Operating Expenses                      | \$  | 100,000        | \$ | 100,000           | \$   |            | 0.0%      | \$ | 100,000        | \$                                       |           | 0.0%      |
| Total Direct Expenses                         | \$  | 551,892        | \$ | 545,292           | \$   | (6,600)    | -1.2%     | \$ | 563,826        | \$                                       | 11,934    | 2.2%      |
| Indirect Expenses                             | \$  | 279,600        | \$ | 256,532           | \$   | (23,068)   | -8.3%     | \$ | 267,735        | \$                                       | (11,865)  | -4.2%     |
| Other Non-Operating Expenses                  | \$  | -              | \$ | -                 | \$   | -          | -         | \$ | -              | \$                                       | -         | -         |
| TOTAL BUDGET (B)                              | \$  | 831,492        | \$ | 801,824           | \$   | (29,668)   | -3.6%     | \$ | 831,561        | \$                                       | 69        | 0.0%      |
| CHANGE IN WORKING CAPITAL (=A-B) <sup>1</sup> | \$  | (137,800)      | \$ | (107,132)         | \$   | 30,668     |           | \$ | (114,100)      | \$                                       | 23,700    | -         |
|   |     |                |    |                   |  |            |           |    |                |  |           |           |

<sup>&</sup>lt;sup>1</sup> Fixed Assest included in Indirect Expenses.

#### **Statutory Assessments**

WIRAB's proposed funding assessment of \$715,461 is allocated at \$599,496 (83.8%) to the U.S. portion; \$102,821 (14.4%) to the Canadian portion; and \$13,144 (1.8%) to the Mexican portion of the Western Interconnection.

### **Key Assumptions**

The WIRAB 2025 Business Plan and Budget is based on the following assumptions:

- There will be no significant expansion of the FERC responsibilities as a result of legislation or administrative actions.
- There is a minor expansion of NERC and WECC responsibilities due to FERC Order 901 requiring NERC to develop new or modify Reliability Standards to Address Inverter-Based Resources.
- WIRAB will monitor reliability coordination activities at the RC West, SPP, the AESO, and BC Hydro.
- WIRAB will monitor resource adequacy and transmission planning activities at the Western Power Pool.
- WIRAB will hold two in-person meetings in 2025.
- WIRAB will organize and sponsor webinars and workshops on key reliability issues for WIRAB members, state and provincial representatives, industry representatives, and other interested stakeholders.
- WIRAB will attend all WECC Board of Directors and Member Advisory Committee (MAC) meetings.
- WIRAB will attend select NERC meetings and workshops on relevant topics.
- WIRAB will annually visit with FERC in its offices.
- WIRAB will monitor all FERC business meetings.
- WIRAB will attend FERC technical conferences on reliability issues.

# Section A – Statutory Activities

## 2025 Business Plan and Budget

WIRAB's advice to the FERC, NERC, and WECC can be grouped into four categories that are appropriately funded under Section 215 of the FPA:

- 1. **Governance and Strategic Planning:** Section 215(j) of the FPA authorizes WIRAB to provide advice to the FERC on the governance, strategic direction, budget, and fees of WECC.
- 2. **Emerging Trends and System Risks:** WIRAB must maintain awareness of system conditions, emerging trends, and system risks in order to provide effective and technically sound advice regarding the strategic direction of the FERC, NERC, and WECC. WIRAB also uses knowledge of emerging trends and risks to provide advice to WECC on reliability readiness activities and proactive compliance efforts. These activities are appropriately funded under Section 215(j) of the FPA.
- 3. **Periodic Reliability Assessments:** Section 215(g) of the FPA requires NERC to conduct periodic assessments of the reliability and adequacy of the BPS. WECC assists NERC in performing this statutory activity. WIRAB works closely with WECC to improve reliability and resource adequacy assessments in the Western Interconnection.
- 4. **Reliability Standards and Proactive Enforcement:** Section 215(j) of the FPA authorizes WIRAB to provide advice to the FERC on whether reliability standards are just, reasonable, not unduly discriminatory, or preferential, and in the public interest. WIRAB works closely with WECC to identify emerging problems or conditions that should be considered in the course of requesting, drafting, and voting on amendments to existing standards and in developing new standards.

WIRAB's activities in each of these categories are described in the following subsections.

## **Governance and Strategic Planning**

Section 215(j) of the FPA authorizes WIRAB to advise the FERC, NERC, and the regional entity (i.e., WECC) on the governance, strategic direction, budget, and fees of WECC. To inform WIRAB on governance matters, the WIRAB staff engages with the WECC Board of Directors, management, Technical Committees, Joint Guidance Committee, and Member Advisory Committee (MAC). Through this engagement, WIRAB monitors developments related to WECC's organizational governance, strategic direction, and business plan and budget. This engagement informs WIRAB's efforts to evaluate the effectiveness and efficiency of operations at WECC and to ensure that all "activities conducted pursuant to Section 215 are just, reasonable, not unduly discriminatory or preferential, and in the public interest."

The WIRAB staff also conducts open monthly meetings with WIRAB Members. During these teleconference meetings, WIRAB staff provides WIRAB Members, WECC's Class 5 Representatives (i.e., representatives of state and provincial governments), and other interested stakeholders with regular updates on current and upcoming activities at WECC and other reliability topics in the Western Interconnection. These meetings provide WIRAB Members with an opportunity to develop and review WIRAB's written Advice. During these webinars, the WIRAB staff also provides opportunities for WECC staff to engage with and discuss governance-related activities with WIRAB Members. WIRAB provides WECC with Advice with a single common voice from the states and provinces on operational practices and performance, annual business plans and budgets, strategic planning, committee charters, proposed bylaw amendments, fees, and other matters.

Additionally, WIRAB is deeply involved in WECC's quinquennial organizational review required by Section 4.9 of the WECC Bylaws. Once the organizational review is completed, WIRAB monitors and participates in the implementation of the recommendations that the WECC Board develops during the organizational review. WIRAB and the WIRAB staff will continue to engage with WECC and to provide Advice and guidance to the organization as appropriate.

## **Emerging Trends and System Risks**

WIRAB staff engages in the following ongoing activities in order to provide independent

expert advice on emerging reliability trends and system risks:

### **Event Analysis and Situational Awareness:**

Understanding important operational issues confronting the BPS today, as well as in the past, is key to maintaining and improving reliability in the Western Interconnection. Event analysis and situational awareness matters should be discussed in open and transparent forums, when appropriate. These types of discussions bring together utility operators, who deal with these types of issues on a day-to-day basis, with thought leaders to provide different perspectives that can add value to tackling reliability challenges. It is important to share lessons learned and to promote best practices to ensure that system operators have access to the tools and knowledge necessary to maintain a reliable grid in real-time.

WIRAB members and the WIRAB staff engage in relevant discussions and activities by attending and participating in WECC's technical committee meetings, monitoring the western Reliability Coordinators, and monitoring reliability activities in other forums. The WIRAB staff also provides leadership by conducting educational webinars and develops panel sessions for WIRAB's in-person meetings. These outreach opportunities are designed to promote discussions among Western regulators, policymakers, and other stakeholders regarding emerging trends and risks associated with system events.

#### **Expanding Market Operations:**

Organized markets continue to expand in the Western Interconnection. The California Independent System Operator (CAISO) Western Energy Imbalance Market (WEIM) continues to gain new participants, and the CAISO will soon offer day-ahead market services to WEIM participants (Extended Day-Ahead Market, or EDAM). The Southwest Power Pool (SPP) is also offering market services, including Western Energy Imbalance Services (WEIS), to Balancing Authorities (BAs) and Transmission Operators (TOPs) within the Western Interconnection with expanding services through its Market+ initiative. Some western utilities are also exploring joining SPP's full RTO. Additionally, discussions are occurring through the West-Wide Governance Pathways Initiative to explore a viable path to electricity market inclusive of all western states, with independent governance. These market reforms could result in significant changes to system operations (e.g., transmission scheduling, congestion management, etc.) and create new reliability

challenges and opportunities for the Western Interconnection. The Western Power Pool's Western Resource Adequacy Program (WRAP) is underway, and when it moves to fully binding operations it will allow Western participants to coordinate resource adequacy requirements necessary to maintain reliability.

The WIRAB staff monitors market reform efforts in the Western Interconnection and provides a forum for discussions about reliability-related issues associated with developing multiple markets in the Western Interconnection. The WIRAB staff monitors and participates in forums that are exploring these reliability issues associated with markets taking place at public utility commissions, regional TOP meetings, and ISO/RTO workshops. Additionally, the WIRAB staff engages in relevant WECC technical committee meetings and activities, such as those of WECC's Reliability Risk Committee. WIRAB will continue to provide advice to WECC and to make recommendations as appropriate on reliability challenges and opportunities associated with expanding market operations in the Western Interconnection.

#### **Essential Reliability Services:**

As the resource mix continues to change, some reliability services that have traditionally been provided by synchronous generating resources may not be available to the same extent in the future as the BPS is becoming increasingly reliant on variable inverter-based resources. The electric utility industry must examine alternative opportunities to provide these essential reliability services and develop practices today that support ongoing BPS reliability under a new paradigm. Inverterbased resources, specifically solar PV generation, have historically been regarded as unable to provide grid supporting services, such as frequency support and voltage control, traditionally provided by synchronous resources. However, new power electronic technologies available through advanced inverters and other grid-enhancing technologies now enable inverter-based generation to provide grid support similar to synchronous generators if programmed correctly. FERC Order 901, which requires NERC to develop new or modify Reliability Standards to Address Inverter-Based Resources, will address reliability gaps related to inverter-based resources in data sharing, model validation, planning and operational studies, and performance requirements. The West has been at the forefront of the inverter-based resource issue, so there may still be a need for additional policies and practices to account for emerging technologies to support grid reliability in the future in the Western Interconnection.

WIRAB Members and the WIRAB staff develop expertise by attending, participating in, and monitoring WECC's Technical Committees, NERC's Reliability Issues Steering Committee (RISC), Reliability and Security Technical Committee (RSTC), the FERC's Reliability Technical Conferences, and other forums within the industry. WIRAB provides advice on policies regarding the risks associated with the provision of essential reliability services in the Western Interconnection. Additionally, WIRAB leverages subject matter expertise via consultant projects to educate and inform WIRAB Advice. WIRAB staff also provide periodic outreach webinars and develop panel sessions for WIRAB's in-person meetings to discuss emerging trends. These forums provide an opportunity to inform Western policymakers and other interested stakeholders of the emerging risks associated with the changing resource mix and the importance of maintaining essential reliability services in the Western Interconnection.

## **Periodic Reliability Assessments**

Assessing the reliability implications of a changing resource mix is a high priority for WIRAB. WIRAB strives for WECC to produce high-quality assessments that address the reliability implications of the changing resource mix in the Western Interconnection over a 10- to 20-year timeframe to inform policymaking in the West. Production cost modeling can identify the economic dispatch of a potential new resource mix for every hour over a future year and identify critical hours of system stress. Power flow analysis then examines these critical stress hours for traditional reliability parameters. The integrated use of production cost modeling and power flow analysis will be essential for future reliability assessments of the Western Interconnection.

Additionally, the Western Power Pool (WPP), through its Western Transmission Expansion Coalition (WestTEC) initiative, is undertaking a collaborative, West-wide effort aimed at formulating an actionable transmission plan to cater to the future energy grid's requirements. A West-wide transmission plan will have significant reliability implications that require adherence to principles of transparency, independence, and inclusivity, with due consideration for interconnection-wide transmission planning perspectives. WECC is considering contributing both time and money to support this effort.

WIRAB will monitor the WestTEC initiative and Advise WECC in its participation in the effort. Additionally, WIRAB monitors, advises, and participates in WECC's RAC to promote

improved reliability assessments of the Western Interconnection. WIRAB will encourage and support the RAC in its efforts to integrate WECC's data and modeling capability to perform roundtrip reliability assessments that combine power flow analysis and production cost modeling. WIRAB will also monitor, engage, and communicate findings on leading research about the integration of variable energy resources into the Western Interconnection, such as the work of NERC's Inverter- Based Resource Subcommittee. WIRAB maintains a non-voting member status of the Energy Systems Integration Group where WIRAB Staff engage in technical working groups and workshops to discuss emerging issues, which helps to inform WIRAB's advice to WECC. Further, WIRAB staff monitors and engages with National Laboratories, academic and industry trade organizations such as the Institute of Electrical and Electronics Engineers (IEEE), registered entity activities, and other forums investigating the flexibility and reliability of the power system. WIRAB also provides outreach to Western states and provinces on the policy implications associated with new research.

## **Reliability Standards and Proactive Enforcement**

WIRAB staff engages in the following ongoing activities in order to provide independent expert advice on the development and proactive enforcement of reliability standards:

## **Operations and Planning Reliability Standards:**

Reliability standards were created to provide the minimum requirements for planning and operating the electric grid. The compliance and enforcement of these reliability standards ensure there is oversight and accountability of BPS owners and operators to maintain system-wide reliability. Reliability standards must be strict enough to guarantee that system reliability is maintained, but flexible enough to respond to the changing industry. It is essential to develop and review reliability standards to ensure they effectively preserve reliability while not being overly burdensome on the entities required to comply.

WIRAB staff develops WIRAB advice on the development and proactive enforcement of reliability standards by contracting with subject matter experts with direct knowledge of the efficacy of reliability standards and the burden of compliance on regulated entities. WIRAB staff attends, participates, or monitors WECC's Technical Committee meetings, WECC's Standards Committee meetings, WECC's Reliability and Security Workshop, NERC's standard development process, and

other industry forums. When necessary, WIRAB provides written advice to WECC, NERC and the FERC on the implementation of specific standards within the Western Interconnection. WIRAB staff also conduct educational webinars and in-person panel discussions for WIRAB's meetings to consider emerging trends that may require changes to reliability standards in the Western Interconnection.

## Physical and Cyber Security:

The electric grid's physical and cyber security continues to represent issues of growing concern in the Western Interconnection and across the ERO. The Western Interconnection has experienced physical and cyber incidents that have potentially impacted system reliability. Experiences worldwide demonstrate there is a greater threat to the electric grid reliability related to physical and cyber security. The Critical Infrastructure Protection (CIP) standards provide a baseline level set of requirements for registered entities to maintain the protection of critical assets of the BPS. The CIP standards must be risk-based to ensure that critical assets are protected while maintaining the flexibility to respond to the changing nature of potential threats. It is essential to develop and review the CIP standards to effectively preserve reliability while not being overly burdensome on the entities required to comply.

WIRAB stays abreast of significant incidents that have compromised both the physical and cyber security of the grid through secure briefings and updates from security experts. WIRAB works with WECC and subject matter experts to educate regulators on the steps registered entities take to maintain the physical and cyber security of the grid. WIRAB continues to monitor the development of NERC's CIP standards and will provide advice when appropriate. WIRAB continues to observe NERC's GridEx exercises, which allow utilities to demonstrate how they would respond to coordinated cyber and physical security events. WIRAB encourages entities to broadly share lessons learned and best practices across the Western Interconnection.

# **Section B – Supplementary Financial Information**2025 Business Plan and Budget

## **Working Capital Reserve**

WIRAB projects it will have a working capital reserve of \$613,000 on December 31, 2024, as compared to a desired working capital reserve on December 31, 2025, of \$498,900. The surplus working capital reserve results in a \$114,100 reduction in WIRAB's funding requirement for 2025.

In its 2018 Business Plan and Budget, WIRAB changed its reserve policy to stabilize statutory assessments while reducing its surplus financial reserve over several budget cycles. The FERC allows WIRAB to carry a financial reserve under the proviso that any excess reserves be used to offset future assessments. WIRAB's funding assessments are calculated nine months in advance of each budget year. This assessment is fixed, meaning that, once approved, it cannot be decreased or increased mid-year to match actual expenses more closely. The financial reserve allows for some budgetary flexibility.

Table B-1. Working Capital Reserve Analysis 2024 – 2025

| WIRAB - Working Capital Reserve Analysis 2024-2025                           |                  |  |  |  |  |  |  |  |
|--|------------------|--|--|--|--|--|--|--|
| STATUTORY  |                  |  |  |  |  |  |  |  |
| Beginning Working Capital Reserve (Deficit), December 31, 2023               | 720,130          |  |  |  |  |  |  |  |
| Plus: 2024 Funding (from LSEs or designees) Plus: 2024 Other funding sources | 692,692<br>2,000 |  |  |  |  |  |  |  |
| Minus: 2024 Projected expenses & capital expenditures                        | (801,824)        |  |  |  |  |  |  |  |
| Projected Working Capital Reserve (Deficit), December 31, 2024               | 613,000          |  |  |  |  |  |  |  |
| Desired Working Capital Reserve, December 31, 2025                           | 498,900          |  |  |  |  |  |  |  |
| Minus: Projected Working Capital Reserve, December 31, 2024                  | (613,000)        |  |  |  |  |  |  |  |
| Increase(decrease) in funding requirement to achieve Working Capital Reserve | (114,100)        |  |  |  |  |  |  |  |
| 2025 Expenses and Capital Expenditures                                       | 831,561          |  |  |  |  |  |  |  |
| Less: Penalty Sanctions  | 0                |  |  |  |  |  |  |  |
| Less: Other Funding Sources  | (2,000)          |  |  |  |  |  |  |  |
| Adjustment: To achieve desired Working Capital Reserve                       | (114,100)        |  |  |  |  |  |  |  |
| 2025 NERC Assessment   | 715,461          |  |  |  |  |  |  |  |

Table B-2. 2024 Budget with 2025 & 2026 Projections

| V                                   | VIRAE | 3 - Statemen | t of |           |                   | hange in W                         | orking Capita | al |                      |   |           |          |
|-------------------------------------|-------|--------------|------|-----------|-------------------|------------------------------------|---------------|----|----------------------|---|-----------|----------|
|                                     |       | 2024         |      | 2025      | V<br>2025<br>v 20 | ariance<br>Projection<br>24 Budget | 1             |    | 2026                 | Variance<br>2026 v 2025<br>2026 Projections |           |          |
|                                     |       | Budget       | _ P  | rojection | Ove               | er(Under)                          | % Change      | P  | rojection            | Ov  | er(Under) | % Change |
| unding                              |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| WIRAB Funding                       |       |              |      | 745 464   |                   |                                    | 2.20/         |    | =                    |   |           | 2 50/    |
| Assessments                         | \$    | 692,692      | \$   | 715,461   | \$                | 22,769                             | 3.3%          | \$ | 741,000              | \$  | 25,539    | 3.6%     |
| Penalty Sanctions                   | _     |              | _    | 715 461   | _                 |                                    | 2.20/         | _  | 744 000              | _   |           | 2.60/    |
| Total WIRAB Funding                 | \$    | 692,692      | \$   | 715,461   | \$                | 22,769                             | 3.3%          | \$ | 741,000              | \$  | 25,539    | 3.6%     |
| Membership Dues                     |       | _            |      | _         |                   | _                                  |               |    | _                    |   | _         |          |
| Testing Fees                        |       | _            |      | _         |                   |                                    |               |    | _                    |   | _         |          |
| Services & Software                 |       | _            |      | _         |                   | -                                  |               |    | _                    |   | _         |          |
| Workshops                           |       | -            |      | -         |                   | _                                  |               |    | _                    |   | _         |          |
| Interest                            |       | 1,000        |      | 2,000     | \$                | 1,000                              | 100.0%        |    | 2,000                | \$  | -         | 0.0%     |
| Miscellaneous                       |       | -            |      | -         |                   | -                                  |               |    | -                    |   | -         |          |
| Total Funding (A)                   | \$    | 693,692      | \$   | 717,461   | \$                | 23,769                             | 3.4%          | \$ | 743,000              | \$  | 25,539    | 3.6%     |
| xpenses                             |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| Personnel Expenses                  |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| Direct Labor                        |       | 269,892      |      | 281,826   |                   | 11,934                             | 4.4%          |    | 293,100              | \$  | 11,274    | 4.0%     |
| Payroll Taxes                       |       | 200,002      |      | 201,020   |                   | -                                  | 11.70         |    | 255,255              | *   | -         |          |
| Benefits                            |       |              |      |           |                   |                                    |               |    |                      |   | -         |          |
| Retirement Costs                    |       |              |      |           |                   | -                                  |               |    |                      |   | -         |          |
| <b>Total Personnel Expenses</b>     | \$    | 269,892      | \$   | 281,826   | \$                | 11,934                             | 4.4%          | \$ | 293,100              | \$  | 11,274    | 4.0%     |
| Meeting Expenses                    |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| WIRAB Meetings                      | \$    | 101,500      | \$   | 101,500   | \$                |                                    | 0.0%          | \$ | 104,500              | \$  | 3,000     | 3.0%     |
| State Travel                        | \$    | 42,400       | \$   | 42,400    | \$                | _                                  | 0.0%          | \$ | 43,700               | \$  | 1,300     | 3.1%     |
| Staff Travel                        | \$    | 38,100       | \$   | 38,100    | \$                |                                    | 0.0%          | \$ | 39,200               | \$  | 1,100     | 2.9%     |
| Total Meeting Expenses              | \$    | 182,000      | \$   | 182,000   | \$                |                                    | 0.0%          | \$ | 187,400              | \$  | 5,400     | 3.0%     |
| O                                   |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| Operating Expenses                  | 4     | 100.000      | 4    | 100.000   | 4                 |                                    | 0.00/         | \$ | 100.000              | 4   |           | 0.00/    |
| Consultants & Contracts Office Rent | \$    | 100,000      | \$   | 100,000   | \$                | -                                  | 0.0%          | Ş  | 100,000              | \$  | -         | 0.0%     |
| Office Costs                        |       | _            |      | -         |                   | _                                  | -             |    | _                    |   | _         | _        |
| Professional Services               |       |              |      |           |                   |                                    |               |    |                      |   |           |          |
| Miscellaneous                       |       |              |      | -         |                   |                                    |               |    | _                    |   | _         | _        |
| Depreciation                        |       | _            |      | _         |                   |                                    | _             |    |                      |   | _         |          |
| Total Operating Expenses            | \$    | 100,000      | \$   | 100,000   | \$                | _                                  | 0.0%          | \$ | 100,000              | \$  | _         | 0.0%     |
| Total Direct Expenses               | \$    | 551,892      | \$   | 563,826   | \$                | 11,934                             | 2.2%          | \$ | 580,500              | \$  | 16,674    | 3.0%     |
| Indirect Expenses                   | \$    | 279,600      | \$   | 267,735   | \$                | (11,865)                           | -4.2%         | \$ | 278,400              | \$  | 10,665    | 4.0%     |
|                                     | \$    | _            | \$   |           | \$                |                                    |               | \$ | _                    | \$  | _         | _        |
| Other Non-Operating Expenses        |       |              | ~    |           |                   |                                    |               | _  |                      |   |           |          |
| Other Non-Operating Expenses        |       |              | ć    | 921 EC1   | ć                 | 60                                 | 0.00/         | ċ  | 828 000              | ¢   | 27 220    | 2 20/    |
| Other Non-Operating Expenses        | \$    | 831,492      | \$   | 831,561   | \$                | 69                                 | 0.0%          | \$ | 858,900              | \$  | 27,339    | 3.3%     |
|                                     |       |              | \$   |           | _                 | 23,700                             | 0.0%          |    | 858,900<br>(115,900) |   | (1,800)   | 3.3%     |

<sup>&</sup>lt;sup>1</sup> Fixed Assest included in Indirect Expenses.

WIRAB projects a 0.0% increase to its annual budget in 2025 and a 3.3% increase in 2026. These increases and decreases reflect standard annual changes in indirect expense, expected cost-of-living adjustments to personnel expenses for employees, personnel allocations, and meeting expenses.

# Section C – Non-Statutory Activities 2025 Business Plan and Budget

WIRAB does not engage in non-statutory activities.

# Section D – Additional Consolidated Financial Statements

## 2025 Business Plan and Budget

## **Statement of Financial Position**

Table D-1 provides WIRAB's Statement of Financial Position as of the following dates:

- As of June 30, 2023, per audit
- As of December 31, 2024, projected
- As of December 31, 2025, as budgeted

Table D-1. Statement of Financial Position, Three-Year Comparison

| WIRAB - Statement of Financial Position |    |                                |  |         |    |         |  |  |  |  |  |  |
|---|----|--------------------------------|--|---------|----|---------|--|--|--|--|--|--|
| STATUTORY                               |    |                                |  |         |    |         |  |  |  |  |  |  |
|   |    | As of<br>e 30, 2023<br>(Audit) | As of<br>December 31, 2025<br>(Budgeted) |         |    |         |  |  |  |  |  |  |
| Assets Cash and Investments             | \$ | 917,471                        | \$                                       | 613,000 | \$ | 498,900 |  |  |  |  |  |  |
| Total Assets                            | \$ | 917,471                        | \$                                       | 613,000 | \$ | 498,900 |  |  |  |  |  |  |

# **Appendix A – Organization Chart**

# 2025 Business Plan and Budget

The WIRAB Staff Organization Chart is shown below.

