Western Interconnection Regional Advisory Body

2024 Business Plan and Budget

June 21, 2023

Approved 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 2024 is $831,492. This amount is $52,028 (5.9%) lower than the amount in WIRAB's approved 2023 budget. Total proposed full-time equivalents (FTEs) for 2024 have decreased by 0.40 FTEs to 2.60 FTEs. WIRAB's total funding requirement is $693,692. As shown in Table 1 below, this amount represents the total statutory expenses of $831,492 less $137,800 in statutory working capital requirement. WIRAB's proposed funding assessment is $692,692, an increase of $10,772 (1.6%) from the 2023 funding assessment. WIRAB proposes to allocate the funding assessment as follows: $580,417 (83.8%) to the U.S. portion; $99,549 (14.4%) to the Canadian portion; and $12,726 (1.8%) to the Mexican portion of the Western Interconnection. The following table summarizes the WIRAB proposed budget for 2024.

Table 1. WIRAB Budget for 2024

WIRAB - Total Resources (in whole dollars)	2024 Budget	U.S.	Canada	Mexico
Statutory FTEs	2.60			
Non-statutory FTEs				
Total FTEs	2.60			
Statutory Expenses	$ 831,492			
Non-Statutory Expenses				
Total Expenses	$ 831,492			
Statutory Inc(Dec) in Fixed Assets				
Non-Statutory Inc(Dec) in Fixed Assets				
Total Inc(Dec) in Fixed Assets	$ -			
Statutory Working Capital Requirement	$ (137,800)			
Non-Statutory Working Capital Requirement	0			
Total Working Capital Requirement	$ (137,800)			
Total Statutory Funding Requirement	$ 693,692			
Total Non-Statutory Funding Requirement	$ -			
Total Funding Requirement	$ 693,692			
Statutory Funding Assessments	$ 692,692	$ 580,417	$ 99,549	$ 12,726
Non-Statutory Fees				
NEL	883,331,495	740,157,105	126,946,192	16,228,198
NEL%	100.00%	83.8%	14.4%	1.8%

[1] 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.

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.

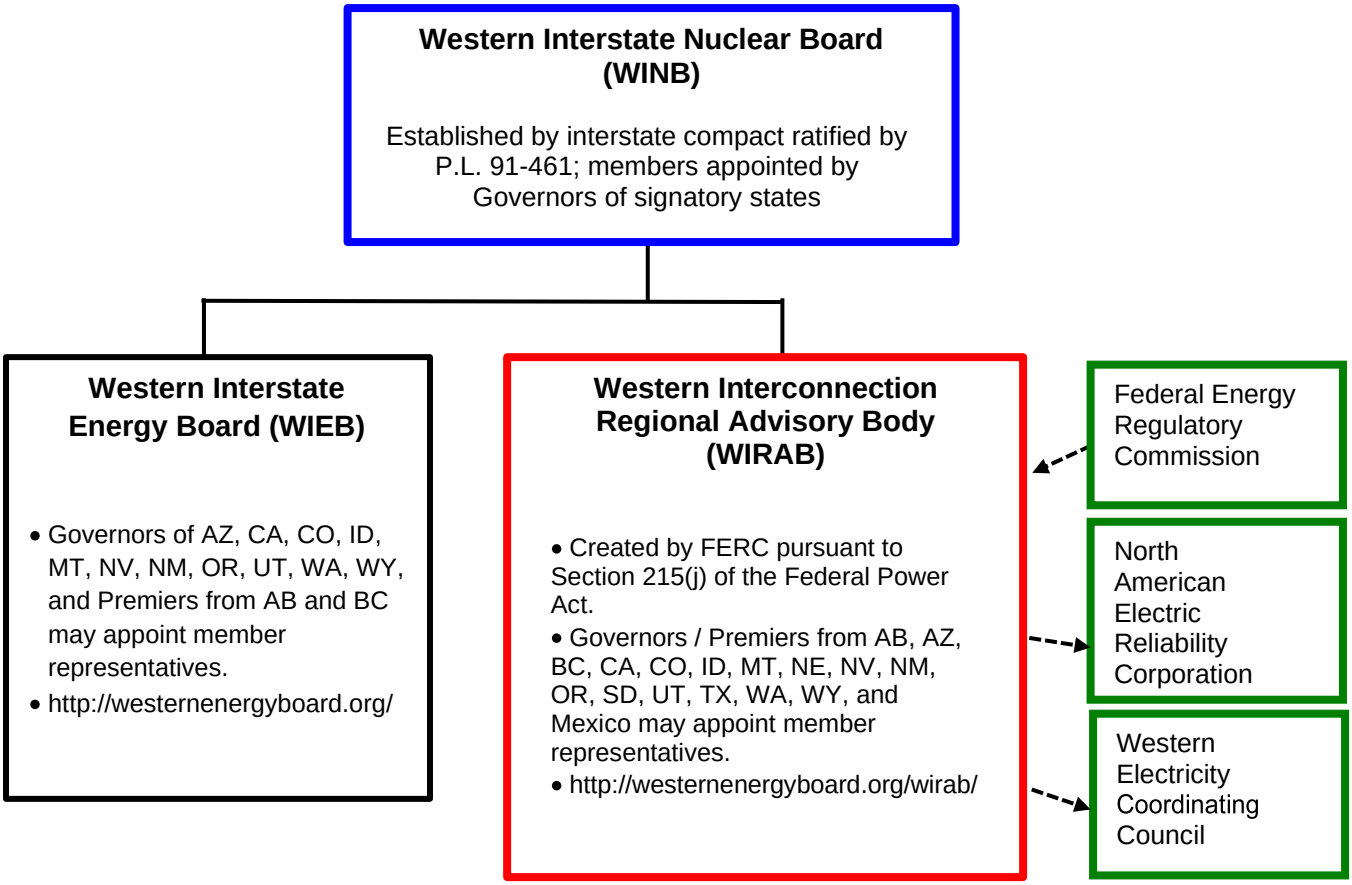
In July 2006, FERC issued an order granting the Governors' petition to establish WIRAB.[2] In its order, FERC determined that WIRAB should receive funding for its Section 215(j) activities and directed WIRAB to annually develop a budget and related information for submittal through the Electric Reliability 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.[3] 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.

[2] 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.

[3] 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, 2023):

Figure 2. WIRAB Membership List

WIRAB Member Representatives		
Alberta	Betsy Li Alward	Director, Generation, Transmission and Markets Policy, Energy Policy, Alberta Energy
Arizona	Lea Márquez Peterson	Commissioner, Arizona Corporation Commission
British Columbia	Chris Gilmore	Executive Director, Electricity Policy Branch, Ministry of Energy, Mines and Low Carbon Innovation
California	Siva Gunda	Vice Chair, California Energy Commission
Colorado	Keith Hay	Director of Utility Policy, Colorado Energy Office
Idaho	Richard Stover	Administrator, Idaho Governor's Office of Energy and Mineral 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	Mark Thompson	Commissioner, Oregon Public Utility Commission
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

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.

2024 Strategic Initiatives

The Western Interconnection's generation resource mix is rapidly changing due to environmental policy, market forces, and the retirement of traditional thermal resources. The transition to a lower-carbon economy is resulting in the growth of utility-scale wind and solar electricity generation, with the latter concentrated in California and the Desert Southwest. Energy storage procurement is also becoming essential to support higher penetrations of weather-dependent variable energy resources.

However, these changes to the generation resource mix present reliability challenges, particularly as climate change impacts become more severe. Wildfires, droughts, heat waves, and extreme cold weather complicate utility planning and operations. Energy policymakers and regulators in many jurisdictions increasingly incorporate environmental and climate change factors into grid infrastructure decisions, requiring that a renewed focus on grid reliability be front and

center as the grid transforms to meet users' current and future needs.

Grid modernization efforts present both reliability challenges and opportunities for the Western Interconnection. The increasing adoption of distributed energy resources (DER) creates a need for better coordination among Bulk Power System (BPS) and distribution system operators. Improvements to coordination will require additional research, development, and implementation of new technologies and operational tools that can be used to improve system reliability throughout the Western Interconnection. Transmission infrastructure is also necessary to move power around the interconnection as reliably and efficiently as possible. Cybersecurity threats and physical threats require attention to maintain the protection of critical electric grid infrastructure.

The structure of Western power markets is also undergoing significant change, creating both additional reliability challenges and opportunities. The California Independent System Operator (CAISO) and the Southwest Power Pool (SPP) both offer market services to entities within the Western Interconnection and are in the process of expanding these market offerings. Market reforms could result in significant changes to system operations, including transmission scheduling, congestion management, and reliability coordination.

Transmission planning and development are critical to ensuring a reliable and resilient electric grid in the Western Interconnection. As the generation resource mix continues to change and the grid becomes more complex, 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.

To address these ongoing changes, WIRAB has identified three strategic initiatives it will pursue in 2024. These initiatives encourage WECC to lead in efforts to create a reliable electric grid in the West.

Initiative 1: Advise WECC to continue to serve as an unbiased source of interconnection-wide information regarding the resource adequacy of the Western Interconnection and work collaboratively with the regional resource adequacy programs in the West.

Resource Adequacy in the Western Interconnection is critical as the region continues to experience changes in loads and resource mix. The Western Assessment of Resource Adequacy (WARA) is essential for assessing resource adequacy throughout the region. It enables WECC to encourage the industry to consider energy-based probabilistic approaches that improve the determination of Planning Reserve Margins (PRMs) to account for increasing demand and resource variability.

As coal-fired power plants across the West retire, new resource additions must be planned and constructed deliberately to remain within adequate PRMs. Regional coordination through the Western Resource Adequacy Program (WRAP) will improve resource adequacy accountability, but coordination across the seams of the WRAP and other jurisdictions may become a challenge. Therefore, WECC should facilitate coordinated efforts to calibrate import assumptions between RA programs and help align import rules between regions.

As the Regional Entity for the Western Interconnection, WECC must act as an early warning system and alert stakeholders when the system is falling short. It should serve as an unbiased information source regarding the Western Interconnection's resource adequacy. To accomplish this, WECC should encourage coordination between resource adequacy programs and assess both short- and long-term resource adequacy across the Western Interconnection in the WARA to identify risks.

Furthermore, WECC should continue to track resource construction and identify if the system is not on track. It should investigate and identify the issues causing the deterrent, such as supply chain issues, lack of expert labor contractors, or regulatory barriers, and facilitate conversations to address potential shortcomings. The delay in generation resource construction from possible complications may remain unknown in the current approach until it is too late to address, harming the ability to stay within PRMs. Therefore, WECC should begin to monitor resource generation construction and compare these efforts to the resource additions in the WARA for better reliability and accountability throughout the Western Interconnection.

The goals of this initiative are to:

- Ensure that WECC has a meaningful role in providing valuable information regarding the Resource Adequacy of the Western Interconnection.

- Ensure that the Western Assessment of Resource Adequacy analyzes planned generation resource construction to ensure overall resource development is proceeding efficiently and according to resource plans.

- Identify risks due to uncoordinated resource adequacy programs.

- Initiate discussions with regional resource adequacy programs in the West and encourage them to coordinate efforts to improve regional resource adequacy accountability.

The actions that WIRAB staff will take to achieve these goals will be to:

- Work with WECC stakeholders to identify the roles WECC should have in Resource Adequacy in the Western Interconnection.

- Help WECC organize meetings, workshops, and webinars to discuss the best practices and identify potential roadblocks to collaboration.

- Work with WECC to compare generation resource construction to resource additions in the Western Assessment of Resource Adequacy and determine if the Western Interconnection is falling behind or remaining on track.

- Invite WECC to share its work on resource adequacy with regulators and policymakers throughout the Western Interconnection.

- Participate in WECC activities designed to further these goals.

In conclusion, resource adequacy planning and development in the Western Interconnection are critical to ensure a reliable and sustainable electricity supply. WECC's efforts to facilitate coordination among RA programs, monitor resource construction, and identify potential risks in the WARA are essential to achieve this goal.

Initiative 2: Advise WECC to add value to transmission planning in the West by conducting reliability assessments on long-term transmission trends and disseminating transmission planning information to stakeholders in the Western Interconnection.

The rapidly changing resource mix in the Western Interconnection requires new thinking

and assessment. WECC should approach its transmission assessments from the lens of reliability with open and transparent guidance from the states, provinces, industry, and other stakeholders. Careful consideration of the impacts of the increased development of invertor-based resources far from load centers coupled with the retirement of large thermal plants in those same areas will be critical.

WECC should conduct an interconnection-wide transmission trends assessment to identify the key trends and issues affecting the transmission system. This includes assessing the impact of increased penetration of renewable energy, changes in electricity demand, and the potential impact of new technologies. Transmission planners can use this information to inform transmission planning and development, helping to ensure that the grid can reliably meet consumers' needs.

WECC should monitor and investigate the potential risk of weak grid issues in various parts of the Western Interconnection as part of its interconnection-wide reliability assessment of transmission expansion. Short-term and targeted reliability studies can identify near-term solutions, such as demand response programs.

WECC should support the collection, compilation, and distribution of transmission planning data in the West in a standardized format, allowing for better regional coordination. By becoming a central clearinghouse for critical data, WECC can streamline the transmission planning process, reduce costs, and increase efficiency.

Once WECC conducts its interconnection-wide transmission trends assessment and collects transmission planning data, it is important to disseminate this information to stakeholders in the Western Interconnection. Stakeholders such as utilities, regional planning entities, regulatory agencies, and policymakers rely on this information to inform transmission planning and development decisions. WECC should develop a clear and comprehensive plan for disseminating this information to ensure it reaches all relevant stakeholders. This could include regular reports, webinars, workshops, and other communication channels. Additionally, WECC should ensure that this information is presented in a clear and accessible manner, with appropriate context and analysis, to help stakeholders understand its implications for transmission planning and development in the West. By effectively disseminating its work, WECC can help to ensure that the best available data and analysis inform transmission planning in the Western

Interconnection.

The goals of this initiative are to:

- Provide an interconnection-wide assessment of the potential need for the new transmission capacity to facilitate the development of generation resources needed to meet reliability expectations.

- Perform an assessment of the grid in the Western Interconnection that examines potential reliability concerns from weak grid issues or other reliability problems that might arise with the changing load and resource mix.

- Disseminate transmission trends and planning data to relevant stakeholders in the Western Interconnection.

The actions that WIRAB staff will take to achieve these goals will be to:

- Encourage WECC to perform an interconnection-wide assessment of plans and development of transmission.

- Encourage WECC to perform reliability assessments to monitor and respond to potential weak grid issues in remote areas with long transmission lines that link loads to resources.

- Engage with state and provincial regulators and policymakers to guide WECC's assessments to ensure they are sufficiently robust and meet emerging reliability trends in the Western Interconnection.

- Invite WECC to share its work on transmission assessments with regulators and policymakers throughout the Western Interconnection.

In conclusion, enhancing transmission planning in the Western Interconnection is essential for WECC and other entities to effectively plan, operate, and maintain a reliable, affordable, and sustainable electric grid for the region.

Initiative 3: Advise WECC to work with WIRAB to engage state and provincial regulators and policymakers in the West to better understand the reliability impacts of energy policymaking

in the Western Interconnection from diverse stakeholders.

The WECC Board relies on two advisory bodies, WIRAB and the WECC Member Advisory Committee (MAC), to provide the Board with critical perspectives when making decisions. The WECC MAC provides advice on behalf of WECC members, and WIRAB provides advice on behalf of the western states and provinces. Both groups work independently to give advice. The WECC MAC is comprised of three member representatives from each of WECC's Member Classes:

- Class 1: Large Transmission Owners
- Class 2: Small Transmission Owners
- Class 3: Transmission Dependent Energy Service Providers
- Class 4: End Users
- Class 5: Representatives of State and Provincial Governments

In the West, the states and provinces are grappling with challenging policy questions that impact the reliability of the bulk power system. WECC has two clear avenues to engage with state and provincial policymakers through WIRAB or MAC Class 5. WIRAB and the WECC MAC have established greater coordination so that both bodies provide advice to the WECC Board from their perspectives simultaneously. This coordination, as well as the WECC Board specifically directing policy questions to its advisory bodies, has given the Board better and more timely information when it makes a decision.

WECC plays a critical role in ensuring the reliability of the Western Interconnection. Regulators and policymakers look to WECC as an independent and unbiased source of information on reliability matters in the West. With this trust, WECC continues to improve its engagement with state and provincial policymakers, but the regulators and policymakers are stretched thin. By leveraging WIRAB, WECC can more efficiently help those policymakers understand the reliability impacts of energy policy in the Western Interconnection and improve the outcome of policymaking.

The goals of this initiative are to:

- Improve WECC's engagement with state and provincial policymakers.
- Increase the efficiency of how the regulators and policymakers in the states and provinces interact with WECC.

The actions that WIRAB staff will take to achieve these goals will be to:

- Encourage WECC and WIRAB to collaborate to develop strategies for engaging state and provincial regulators and policymakers in the West on reliability issues.
- Encourage WECC to leverage WIRAB meetings to educate regulators and policymakers on the reliability impacts policy actions may have on the Western Interconnection.
- Encourage WECC to consider new governance structures that increase the efficiency of how WECC gets engagement from regulators and policymakers in the West.
- Invite WECC to WIRAB meetings to share its work with regulators and policymakers throughout the Western Interconnection to raise awareness of reliability issues and ensure that policy decisions are well-informed.

Through these tasks, WECC can improve its engagement with state and provincial policymakers and increase the efficiency of interactions between regulators, policymakers, and WECC. This will help to ensure that policymakers have a better understanding of the reliability impacts of their policy decisions and that the Western Interconnection continues to operate reliably and efficiently.

2024 Budget and Assessment Impacts

The WIRAB proposed budget for 2024 is $831,492. This amount is $52,028 (5.9%) lower than the amount in WIRAB's approved budget for 2023. Total proposed FTEs for 2024 are 2.6, which is a 0.4 FTE decrease from 2023. The budget continues to maintain 2.0 FTEs dedicated to WIRAB activities with support from three other technical staff. The reduction is a function of aligning staff allocations to actual work and will not have an impact on continuing work or WIRAB's mission. WIRAB's total funding requirement is $693,692. WIRAB's proposed funding assessment is $692,692. For reconciliation purposes and to maintain assessment stabilization, this funding assessment is $10,772 (1.6%) higher than the 2023 funding assessment which was reduced by 2.4%.

Personnel and Indirect Expenses

Salary expenses (exclusive of Indirect expenses) decreased from $322,320 in the 2023 Budget to $269,892 (16.3%) in the 2024 Budget due to personnel and allocation changes. WIRAB uses a single rate method for indirect expenses. The indirect expenses include office expenses, medical and retirement expenses as well as holiday, vacation, and sick leave for WIRAB staff. The indirect rate is a percentage of direct staff time spent on WIRAB. The indirect rate increases from 96.7% of direct labor costs in the 2023 Budget to 103.6% in the 2024 Budget. Table 2 shows personnel and indirect expenses per FTE for the approved 2023 Budget and the proposed 2024 Budget.

Table 2. Personnel and Indirect Expense Analysis, 2023-2024

WIRAB - Personnel and Indirect Expense Analysis 2023-2024					
STATUTORY					
	Budget 2023	Projection 2023	Budget 2024	Variance 2024 v 2023	Variance %
Salary Expense	$ 322,320	$ 300,000	$ 269,892	$ (52,428)	-16.3%
FTEs	3.00	3.00	2.60	(0.40)	-13.3%
Cost per FTE	$ 107,440	$ 100,000	$ 103,805	$ (3,635)	-3.4%
Indirect Rate	96.7%	100.2%	103.6%		
Indirect Expense	$ 311,600	$ 300,450	$ 279,600	$ (32,000)	-10.3%
FTEs	3.00	3.00	2.60	(0.40)	-13.3%
Cost per FTE	$ 103,867	$ 100,150	$ 107,538	$ 3,672	3.5%

Meeting Expense

Meeting costs increased from $56,100 to $101,500 in the proposed 2024 Budget due to increased costs for events, venues, and coordination. 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 decreased from $93,500 to $80,500 to adjust for a decrease in staff travel. 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 post pandemic conditions.

Consultants and Contracts

The 2023 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 2024. 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 2023 to 2024

WIRAB - Statement of Activities and Change in Working Capital 2023 Budget & Projection, and 2024 Budget							
STATUTORY							
	2023 Budget	2023 Projection	Variance 2023 Projection v 2023 Budget Over(Under)	% Change	2024 Budget	Variance 2024 Budget v 2023 Budget Over(Under)	% Change
Funding							
WIRAB Funding							
Assessments	$ 681,920	$ 681,920	$ -	0.0%	$ 692,692	$ 10,772	1.6%
Penalty Sanctions	-	-	-		-	-	
Total WIRAB Funding	**$ 681,920**	**$ 681,920**	**$ -**	**0.0%**	**$ 692,692**	**$ 10,772**	**1.6%**
Membership Dues	-	-	-		-	-	
Testing Fees	-	-	-		-	-	
Services & Software	-	-	-		-	-	
Workshops	-	-	-		-	-	
Interest	1,000	1,000	$ -	0.0%	1,000	$ -	0.0%
Miscellaneous	-	-	-		-	-	
Total Funding (A)	**$ 682,920**	**$ 682,920**	**$ -**	**0.0%**	**$ 693,692**	**$ 10,772**	**1.6%**
Expenses							
Personnel Expenses							
Salaries	322,320	300,000	(22,320)	-6.9%	269,892	$ (52,428)	-16.3%
Payroll Taxes			-			-	
Benefits			-			-	
Retirement Costs			-			-	
Total Personnel Expenses	**$ 322,320**	**$ 300,000**	**$ (22,320)**	**-6.9%**	**$ 269,892**	**$ (52,428)**	**-16.3%**
Meeting Expenses							
WIRAB Meetings	$ 56,100	$ 98,000	$ 41,900	74.7%	$ 101,500	$ 45,400	80.9%
State Travel	30,200	45,652	$ 15,452	51.2%	42,400	$ 12,200	40.4%
Staff Travel	63,300	31,000	$ (32,300)	-51.0%	38,100	$ (25,200)	-39.8%
		-	$ -		-	$ -	
Total Meeting Expenses	**$ 149,600**	**$ 174,652**	**$ 25,052**	**16.7%**	**$ 182,000**	**$ 32,400**	**21.7%**
Operating Expenses							
Consultants & Contracts	$ 100,000	$ 10,000	$ (90,000)	-90.0%	$ 100,000	$ -	0.0%
Office Rent	-	-	-	-	-	-	-
Office Costs	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-
Total Operating Expenses	**$ 100,000**	**$ 10,000**	**$ (90,000)**	**-90.0%**	**$ 100,000**	**$ -**	**0.0%**
Total Direct Expenses	**$ 571,920**	**$ 484,652**	**$ (87,268)**	**-15.3%**	**$ 551,892**	**$ (20,028)**	**-3.5%**
Indirect Expenses	**$ 311,600**	**$ 300,450**	**$ (11,150)**	**-3.6%**	**$ 279,600**	**$ (32,000)**	**-10.3%**
Other Non-Operating Expenses	**$ -**	**$ -**	**$ -**	-	**$ -**	**$ -**	-
TOTAL BUDGET (B)	**$ 883,520**	**$ 785,102**	**$ (98,418)**	**-11.1%**	**$ 831,492**	**$ (52,028)**	**-5.9%**
CHANGE IN WORKING CAPITAL (=A-B)[1]	**$ (200,600)**	**$ (102,182)**	**$ 98,418**	-	**$ (137,800)**	**$ 62,800**	-
FTEs	3.00	3.00	-	0.0%	2.60	(0.40)	-13.3%

[1] Fixed Assest included in Indirect Expenses.

Statutory Assessments

WIRAB's proposed funding assessment of $692,692 is allocated at $580,417 (83.8%) to the U.S. portion; $99,549 (14.4%) to the Canadian portion; and $12,726 (1.8%) to the Mexican portion of the Western Interconnection.

Key Assumptions

The WIRAB 2024 Business Plan and Budget is based on the following assumptions:

- There will be no significant expansion of the FERC, NERC, or WECC responsibilities as a result of legislation or administrative actions.
- WIRAB will monitor reliability coordination activities at the RC West, SPP, the AESO, and BC Hydro.
- WIRAB will monitor resource adequacy activities at the Western Power Pool.
- WIRAB will hold two in-person meetings in 2024.
- 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 selected 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

2024 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 and the regional entity (i.e., WECC) on the governance, strategic direction, budget, and fees of WECC. 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 monthly meetings with WIRAB Members. During these webinar 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 and guidance to the WECC Board of Directors. During these webinars, the WIRAB staff also provides opportunities for WECC representatives to engage with and discuss governance-related activities with WIRAB Members. WIRAB provides WECC with independent expert advice 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 need to 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 is working to 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. These market reforms could result in significant changes to system operations (e.g., transmission scheduling, congestion management) and create new reliability challenges and opportunities for the Western Interconnection. The Western Power Pool's Western Resource Adequacy Program is underway, and 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. Inverter-based resources, specifically solar PV generation, have historically been regarded as unable to provide the 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. New policies and practices accounting for these emerging technologies need to continue to be developed to support grid reliability in the future.

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. WIRAB staff also provides periodic outreach webinars and develops 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.

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. Further, WIRAB staff monitors and engages with National Laboratories, industry trade organizations such as the Energy Systems Integration Group (ESIG), 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

2024 Business Plan and Budget

Working Capital Reserve

WIRAB projects it will have a working capital reserve of $711,500 on December 31, 2023, as compared to a desired working capital reserve on December 31, 2024, of $573,700. The surplus working capital reserve results in a $137,800 reduction in WIRAB's funding requirement for 2024.

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 2023 – 2024

WIRAB - Working Capital Reserve Analysis 2023-2024	
STATUTORY	
Beginning Working Capital Reserve (Deficit), December 31, 2022	813,719
Plus: 2023 Funding (from LSEs or designees)	681,920
Plus: 2023 Other funding sources	1,000
Minus: 2023 Projected expenses & capital expenditures	(785,102)
Projected Working Capital Reserve (Deficit), December 31, 2023	**711,500**
Desired Working Capital Reserve, December 31, 2024	573,700
Minus: Projected Working Capital Reserve, December 31, 2023	(711,500)
Increase(decrease) in funding requirement to achieve Working Capital Reserve	(137,800)
2024 Expenses and Capital Expenditures	831,492
Less: Penalty Sanctions	0
Less: Other Funding Sources	(1,000)
Adjustment: To achieve desired Working Capital Reserve	(137,800)
2024 NERC Assessment	692,692

Table B-2. 2023 Budget with 2024 & 2025 Projections

WIRAB - Statement of Activities and Change in Working Capital
2023, 2024, and 2025 Budget Projections

STATUTORY

	2023 Budget	2024 Projection	Variance 2024 Projection v 2023 Budget Over(Under)	% Change	2025 Projection	Variance 2025 v 2024 Projections Over(Under)	% Change
Funding							
WIRAB Funding							
Assessments	$ 681,920	$ 681,900	$ (20)	0.0%	$ 692,700	$ 10,800	1.6%
Penalty Sanctions	-	-	-		-	-	
Total WIRAB Funding	**$ 681,920**	**$ 681,900**	**$ (20)**	**0.0%**	**$ 692,700**	**$ 10,800**	**1.6%**
Membership Dues	-	-	-		-	-	
Testing Fees	-	-	-		-	-	
Services & Software	-	-	-		-	-	
Workshops	-	-	-		-	-	
Interest	1,000	1,000	$ -	0.0%	1,000	$ -	0.0%
Miscellaneous	-	-	-		-	-	
Total Funding (A)	**$ 682,920**	**$ 682,900**	**$ (20)**	**0.0%**	**$ 693,700**	**$ 10,800**	**1.6%**
Expenses							
Personnel Expenses							
Salaries	322,320	269,892	(52,428)	-16.3%	280,700	$ 10,808	4.0%
Payroll Taxes			-			-	
Benefits			-			-	
Retirement Costs			-			-	
Total Personnel Expenses	**$ 322,320**	**$ 269,892**	**$ (52,428)**	**-16.3%**	**$ 280,700**	**$ 10,808**	**4.0%**
Meeting Expenses							
WIRAB Meetings	$ 56,100	$ 101,500	$ 45,400	80.9%	$ 104,500	$ 3,000	3.0%
State Travel	$ 30,200	$ 42,400	$ 12,200	40.4%	$ 43,700	$ 1,300	3.1%
Staff Travel	$ 63,300	$ 38,100	$ (25,200)	-39.8%	$ 39,200	$ 1,100	2.9%
Total Meeting Expenses	**$ 149,600**	**$ 182,000**	**$ 32,400**	**21.7%**	**$ 187,400**	**$ 5,400**	**3.0%**
Operating Expenses							
Consultants & Contracts	$ 100,000	$ 100,000	$ -	0.0%	$ 100,000	$ -	0.0%
Office Rent	-	-	-	-	-	-	-
Office Costs	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-
Total Operating Expenses	**$ 100,000**	**$ 100,000**	**$ -**	**0.0%**	**$ 100,000**	**$ -**	**0.0%**
Total Direct Expenses	**$ 571,920**	**$ 551,892**	**$ (20,028)**	**-3.5%**	**$ 568,100**	**$ 16,208**	**2.9%**
Indirect Expenses	**$ 311,600**	**$ 279,600**	**$ (32,000)**	**-10.3%**	**$ 290,800**	**$ 11,200**	**4.0%**
Other Non-Operating Expenses	**$ -**	**$ -**	**$ -**	-	**$ -**	**$ -**	-
TOTAL BUDGET (B)	**$ 883,520**	**$ 831,492**	**$ (52,028)**	**-5.9%**	**$ 858,900**	**$ 27,408**	**3.3%**
CHANGE IN WORKING CAPITAL (=A-B)[1]	**$ (200,600)**	**$ (148,592)**	**$ 52,008**	-	**$ (165,200)**	**$ (16,608)**	-
FTEs	3.00	2.60	(0.40)	-13.3%	2.60	-	0.0%

[1] Fixed Assest included in Indirect Expenses.

WIRAB projects a 5.9% decrease to its annual budget in 2024 and a 3.3% increase in 2025. These increases and decreases reflect 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

2024 Business Plan and Budget

WIRAB does not engage in non-statutory activities.

Section D – Additional Consolidated Financial Statements

2024 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, 2022, per audit
- As of December 31, 2023, projected
- As of December 31, 2024, as budgeted

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

WIRAB - Statement of Financial Position			
STATUTORY			
	As of June 30, 2022 (Audit)	As of December 31, 2023 (Projected)	As of December 31, 2024 (Budgeted)
Assets			
Cash and Investments	$ 1,053,994	$ 711,500	$ 573,700
Total Assets	**$ 1,053,994**	**$ 711,500**	**$ 573,700**

Appendix A – Organization Chart

2024 Business Plan and Budget

The WIRAB Staff Organization Chart is shown below.