

CITY OF SEATTLE

RESOLUTION 32130

A RESOLUTION relating to the City Light Department; endorsing City Light’s Wholesale Energy Risk Management Policy (“WERM Policy”), which governs wholesale energy, transmission, and ancillary services trading, including renewable energy credits and greenhouse gas offsets; establishing the WERM Policy as the guiding policy for managing risks related to wholesale energy, ancillary services, renewable energy credits, and greenhouse gas offsets within the City Light Department; and superseding Resolution 31616.

WHEREAS, to economically provide electricity to its customers, the City Light Department (“City Light”) routinely engages in the buying and selling of wholesale energy products; and

WHEREAS, City Light’s participation in the wholesale energy markets inherently exposes it to various risks, including market and credit risks; and

WHEREAS, utility industry best practices mandate that City Light adhere to a clear and binding policy statement to effectively manage these risks; and

WHEREAS, these industry best practices further stipulate that such policies should receive approval from an independent governing body, such as City Council; and

WHEREAS, the periodic review and amendment of risk management policies are essential for good governance and oversight; and

WHEREAS, the Wholesale Energy Risk Management Policy was initially adopted by the City Council on September 8, 2008, by Resolution 31053; and

WHEREAS, the Environmental Attributes Management Policy was initially adopted by the City Council on June 7, 2010, by Resolution 31216; and

WHEREAS, the Wholesale Energy Risk Management Policy was updated by the City Council on August 9, 2010, with the passage of Resolution 31230; on May 14, 2012, with the

1 passage of Resolution 31365; and on September 3, 2013, with the passage of Resolution
2 31467; and

3 WHEREAS, the Wholesale Energy Risk Management Policy was updated and the
4 Environmental Attributes Management Policy was superseded on September 28, 2015,
5 with the passage of Resolution 31616; and

6 WHEREAS, the attached Wholesale Energy Risk Management Policy contains updates
7 including reorganization and clarification of policy statements; reinforcement of the
8 process to amend Wholesale Energy Risk Management Policy and City Council’s final
9 authority for adoption of such amendments; separation of Wholesale Energy Risk
10 Management Policy from implementing Procedures; revision of the timing of reporting
11 requirements; specification of requirements for internal and external audits of City Light
12 wholesale energy risk management; and affirmation of the responsibility of City Light’s
13 General Manager/ Chief Executive Officer, Chief Financial Officer, Director of Risk
14 Oversight, and internal audit team to report to the City Council and the Mayor any failure
15 to implement Wholesale Energy Risk Management Policy; NOW, THEREFORE,

16 **BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE**
17 **MAYOR CONCURRING, THAT:**

18 Section 1. The Wholesale Energy Risk Management Policy (“Policy”), as developed by
19 the City Light Department’s (“City Light”) management and attached to this resolution as
20 Attachment 1, is endorsed by the City Council and is established as City Light’s policy
21 governing the conduct of wholesale energy risk management. The Policy attached as Attachment
22 1 supersedes the policies endorsed by Resolution 31616, which contained the last update to
23 relevant City Light policies.

1 Adopted by the City Council the 3rd day of September, 2024,
2 and signed by me in open session in authentication of its adoption this 3rd day of
3 September, 2024.

4 

5 President _____ of the City Council

6 The Mayor concurred the 5th day of September, 2024.

7 

8 Bruce A. Harrell, Mayor

9 Filed by me this 5th day of September, 2024.

10 

11 Scheereen Dedman, City Clerk

12 (Seal)

13 Attachments:
14 Attachment 1 - Wholesale Energy Risk Management Policy v2



Seattle City Light

WHOLESALE ENERGY RISK MANAGEMENT POLICY

2024

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DOCUMENT REVIEW HISTORY

| Date | Reviewed by | Document Approved Y/N | Version No. | Reference Documents |
|------------|----------------------|-----------------------|-------------|---------------------|
| 08/06/2008 | ROC | Y | 2008 v1 | Electronic Vote: |
| 09/08/2008 | Seattle City Council | Y | 2008 v1 | Resolution #31053 |
| 07/05/2010 | ROC | Y | 2010 v1 | Electronic Vote: |
| 08/11/2010 | Seattle City Council | Y | 2010 v1 | Resolution #31230 |
| 05/01/2012 | ROC | Y | 2012 v1 | ROC Meeting |
| 05/14/2012 | Seattle City Council | Y | 2012 v1 | Resolution #31053 |
| 03/12/2013 | ROC | Y | 2013 v1 | Electronic Vote: |
| 09/16/2013 | Seattle City Council | Y | 2013 v1 | Resolution #31467 |
| 09/23/2015 | ROC | Y | 2013 v2 | Electronic Vote: |
| 10/05/2015 | Seattle City Council | Y | 2015 v2 | Resolution #31616 |
| 05/03/2019 | ROC | Y | 2019 v2 | Electronic Vote |
| 07/11/2024 | ROC | Y | 2024 v2 | Electronic Vote |
| Date TBD | Seattle City Council | Y | 2024 v2 | Resolution 32130 |
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PREAMBLE

The Seattle City Light (City Light) Department’s Risk Oversight Division (ROD) in collaboration with City Council Central Staff composed the following Wholesale Energy Risk Management Policy (“WERM Policy” or “Policy”). The WERM Policy provides the risk management governance framework for City Light in its objective to mitigate risks resulting from its necessary participation as a buyer and seller of wholesale energy and related products.

City Light’s Risk Oversight Council (ROC) approved the WERM Policy, the City Light General Manager/Chief Executive Officer (GM or GM/CEO) endorsed them, and the Council adopted them via resolution with the Mayor concurring. After adoption, the Director of Risk Oversight (“Director”) made the WERM Policy effective.

The Director has distributed the effective WERM Policy internally within the City Light Department, to the Seattle City Council (“Council”), the Mayor’s Office, and with others that may be affected by their implementation.

Raman Vishwanathan
Director of Risk Oversight
Seattle City Light
Effective Date: TBD

WERM POLICY OVERVIEW

Background and Purpose

City Light faces significant uncertainty regarding both the quantity of energy, or supply, available to the utility and the prices prevailing in the wholesale energy market. The uncertainties in quantity and price of electrical energy result in financial risk for the utility and its customers.

City Light meets the electricity demands of its retail customers with the electricity City Light supplies from its own generating facilities and with electricity that City Light purchases wholesale from various parties. City Light is the 10th largest public utility in the United States and the first municipal utility in the US to own and operate a hydroelectric facility.

City Light's supply of power resources is overwhelmingly generated by hydropower (about 88 percent) and approximately 50 percent of that is supplied by four (of its total seven) hydroelectric projects owned and operated by City Light. Most of the remaining hydropower is purchased utilizing a combination of long-term/short-term contracts and other market transactions.

Hydroelectric output of electricity varies by season in relatively predictable patterns and by specific weather at all times of the year. Hydropower generation is also limited by operating restrictions related to factors such as: downstream flow, fish habitat conditions, recreational opportunities, and management of generation system components.

City Light can generate electricity in surplus of its needs to meet retail customer demand throughout most, but not all, of the year. City Light sells this surplus in the wholesale market and uses the resulting revenue to offset costs that would otherwise be borne by City Light's retail customers through higher electricity rates.

City Light purchases wholesale electricity to meet retail customer demand that exceeds supply when hydropower is limited, typically during December and from mid-July to mid-September. Not surprisingly, City Light's retail demand and wholesale demand both vary seasonally and may vary significantly due to extreme weather. Although, in recent years, climate change has significantly impacted this seasonal pattern including the overall generation from its hydro facilities.

To directly address the significant uncertainty regarding both the quantity of energy available to the utility (due to its reliance on hydroelectric generation and varying demand) and the prices prevailing in the wholesale power market, City Light buys and sells physical energy (electricity) and associated products in the wholesale energy markets. While City Light's principal objective is to ensure that it meets its retail customer demand obligation, it tries, when possible, to do so in a way that generates additional value from its generation portfolio, with due consideration of risk.

Utility industry best practices require that City Light adheres to a clear and binding policy to manage these risks and that City Light's independent governing body adopt, and City Light's GM/CEO endorses the policy. Consistent with best practice, Council first adopted the WERM

Policy on September 8, 2008, by Resolution 31053.

Periodic review and amendment of this WERM Policy is essential for good governance and oversight. This update includes:

- reorganizing and clarifying policy statements;
- reinforcing the process to amend the Policy;
- separating WERM Policy from City Light's WERM Procedures that implement the Policy;
- revising the timing and reporting requirements of internal and external audits of City Light wholesale energy risk management; and
- establishing an affirmative responsibility of the GM/CEO, the Chief Financial Officer (CFO), Director, and City Light's internal audit team to report the City Council and the Mayor any failure to implement WERM Policy that has created a significant and material financial risk to City Light.

The updated WERM Policy is organized into the following sections:

- Scope;
- Objectives for Wholesale Energy Transacting;
- Roles, Responsibilities and Organization;
- Identify Risk and Establish Risk Limits;
- Monitoring and Compliance;
- Reporting;
- Auditing and Management Oversight;
- Amendments to WERM Policy; and
- WERM Procedures

The basic structure of the WERM Policy defines a set of minimal organizational and operational requirements for City Light; documents a set of internal reporting and external auditing standards to ensure compliance with those requirements; and lastly, describes how the WERM Policy will be implemented and how it can be modified when circumstances so dictate.

POLICY FRAMEWORK

1. Scope

Seattle City Light (City Light) experiences imbalances between retail customer demand for electricity and the utility’s power supply and therefore must transact in the wholesale energy markets for energy services and products to reliably serve its customers. The WERM Policy is the City’s plan of action for City Light to mitigate financial risk resulting from City Light’s necessary participation as a buyer and seller of wholesale energy and related products.

1.1: WERM Policy applies to all wholesale trading activities

The WERM Policy applies to the entirety of City Light’s wholesale market activities entered under the authority of Seattle Municipal Code (SMC) 21.49.130. The activities included in the WERM Policy and identified as “wholesale energy” include all energy/power, transmission capacity, ancillary services (spin/non-spin reserves, frequency response, ramping up/down, etc.), all structured transactions with various components of energy, transmission & ancillary services, weather derivatives (if any), all tradeable products with environmental attributes (e.g., RECs, carbon, or other offsets). All the above are for any term including long-term contracts.

2. Objectives for Wholesale Energy Transacting

The basic objectives of City Light’s energy transactions are to meet its customers’ energy needs in a cost-effective manner but do so within the context of uncertain energy generation and complex wholesale energy markets that can add significant financial risk.

2.1: Meet Retail Customers’ Demand

City Lights transacts in wholesale energy markets as authorized by Seattle Municipal Code 21.49.130 to ensure sufficient supply of energy resources to meet retail customers’ demand for electricity continuously and reliably for electricity at the lowest possible cost.

2.2: Seek Fair Value for Assets

When transacting in wholesale energy markets, City Light shall seek to obtain the best possible value for the wholesale energy and related assets under its control, including:

1. energy/power;
2. transmission capacity;
3. ancillaries (spin/non-spin reserves, frequency response, ramping up/down, etc.);
4. all structured transactions with various components of energy; transmission & ancillaries;
5. weather derivatives (if any); and
6. all tradeable products with environmental attributes (e.g., RECs, carbon, or other offsets).

All the above apply to transactions of any term, including long-term contracts as authorized by ordinance. In seeking the maximum value of its energy-generating and transmission assets, City Light will consider all relevant financial risks, operational, maintenance, and capital costs

related to the transactions, and overall market conditions.

3. Roles, Responsibilities, and Organization

In the more than twenty years since the West Coast energy crisis led to a comprehensive review of City Light’s risk management practices, the utility has developed a sophisticated and well-balanced set of internal roles and committee structures to ensure that appropriate risk policies are developed, implemented, and monitored. As described in this document, the current WERM Policy acknowledges the importance of these roles and structures, as well as the interplay among them, and formally establishes their ongoing performance as a fundamental requirement for City Light.

3.1: Segregation of duties, lines of reporting and incentives

One of the most basic and fundamental best practices in managing risks is to formally separate risk-related responsibilities that can stand in conflict with one another.

The “Front-Middle-Back Office” model standard in the electrical utility industry provides for segregating Wholesale Marketing activities into Power Marketing (“Front Office”), Risk Oversight & Wholesale Settlement (“Middle Office”), and Accounting (“Back Office”) functions. Accordingly, City Light should clearly segregate duties, lines of reporting, and incentives between and among these three functions.

At City Light, the Power Supply Business Unit (PSBU) has the role of the Front Office. This cross functional office is responsible for Hedging Strategy and Planning development, market analytics, hydrological forecasting, transaction execution, deal entry, administration of contracts relating to long-term resources, including Renewable Energy Credits and Carbon products, for originating, tracking, and managing all long-term contracts throughout the transaction life cycle. Power Operations and Marketing is the group within the PSBU that transacts in the wholesale energy markets as needed to balance the supply of electricity energy to demand and to mitigate the risks inherent in managing the system. The PSBU is led by the Power Supply Officer (PSO).

The Risk Oversight Division (ROD) serves as the Middle Office. It provides day-to-day continuous independent risk management and oversight functions at City Light. Some of the group’s responsibilities include reviewing and valuing transactions, developing and using quantitative tools and models for portfolio optimization and transactions evaluation, development of appropriate risk metrics, validation of all models that have the potential to impact power marketing decisions, managing credit risks, supporting wholesale settlements, wholesale deal valuation and transaction review. The Director reports directly to the CFO and to the GM/CEO on a regular basis.

The Back Office is comprised of a section of the Accounting Division. It is responsible for liaising with City treasury, transaction billings/ invoicing, receipts, and payments administration.

The subsections that follow provide additional detail and specific requirements regarding these relative roles, with a specific emphasis on the Middle Office’s risk management duties.

3.2: ROC Risk Oversight Council (ROC)

While the day-to-day work of the Front, Middle, and Back offices must be segregated, City Light's senior management must maintain a view across all these functions and must ensure that they are functioning effectively and efficiently. Accordingly, the GM/CEO shall establish and maintain the Risk Oversight Council (ROC) as the body made up of senior City Light managers with authority and responsibility for implementing the WERM Policy and leading City Light's energy risk management efforts on a path of continuous improvement.

The ROC shall be comprised of officers, directors and managers from work groups directly related to wholesale energy trading activities and shall comprise of voting and non-voting members, each having a single vote on matters that are put forward at ROC for decision. In case of a tie or other unresolved circumstances, the GM/CEO shall have the veto to override a decision or break a stalemate. In cases where a member of the ROC leaves the employment of City Light, the Chair of ROC or the GM/CEO will resolve the ROC vacancy by making an interim appointment at his/her discretion. The GM/CEO will reassign as appropriate the ROC membership to a different City Light manager position to correspond with any reorganization of City Light and/or the assigned responsibilities of one of the positions that serves on the ROC.

The Director will act as secretary to the ROC or will delegate such responsibilities and will document all meetings and actions taken by the ROC in meeting minutes that will be distributed to ROC members for their review and acceptance. The Chief Financial Officer will officiate as the acting-chair in the absence of the Chair. Notes/Minutes approved by the ROC will be distributed by the Director to the GM/CEO, ROC members, and made available to the Mayor's Office, and the City Council.

The responsibilities of the ROC include but are not limited to the following:

1. Review and approve wholesale transactions as outlined in the WERM Procedures Manual ("Procedures Manual") that supports the Policy;
2. Commission and review the Procedures Manual associated with this Policy and changes to it;
3. Review and approve transactions outlined in the Procedures Manual, including hedging strategies, implemented by the PSBU;
4. Approve, upon the recommendation of the ROC chair, the methodology used to establish counterparty credit limits;
5. Monitor and assess compliance with this Policy and associated procedures;
6. Discuss and approve exceptions to risk metrics and limits, when appropriate;
7. Discuss and resolve Policy and Procedures violations or exceptions and take corrective action to minimize related losses or increased risks as appropriate;
8. Review this Policy each year and inform the GM/CEO of any changes by July 1st;
9. Discuss elements of wholesale energy risk management best practices and develop a City Light opinion of their specific practicality;
10. Conduct other activities relevant to the implementation and oversight of this Policy and related Procedures;
11. Provide a timely summary of ROC accomplishments for the past year and setting of goals for the upcoming year to the GM/CEO by end of the first quarter of the calendar

- year;
12. Ensure the continual improvement in City Light’s risk management, risk analytics and oversight functions; and
 13. Review and approve expected, recurring, and material changes to all modeling inputs and methodologies related to wholesale trading activities to ensure that market, operational and credit risks are accurately quantified.

3.3: Director of Risk Oversight (“Director”)

The Director serves as the head of City Light’s Risk Oversight Division, which in turn functions as the Middle Office within City Light’s overall management structure. The Director reports directly to the CFO and has a dotted-line reporting responsibility to the GM/CEO to ensure independent direct reporting and that they have a path to directly raise any issues of significant concern. The Director’s responsibilities include leading the ROC and communicating with CFO and PSO, setting limits on risk and credit thresholds, and suspending counterparty transactions.

Regarding wholesale energy risk management efforts, the Risk Oversight Director’s responsibilities include but are not limited to the following:

1. Serve as the Chair of the ROC and lead meetings;
2. Report to the GM/CEO, the Mayor’s Office and the City Council on City Light’s risk exposure and ROC actions on a regular basis and/or as-requested;
3. Engage the City Light Internal Audit team or other external auditor to conduct an independent assessment of this Policy, the related procedures document and adherence to this Policy & Procedures annually;
4. Facilitate reporting of audit findings and recommendations to the GM, the Mayor’s Office, and the City Council within one quarter of audit completion;
5. Ensure that portfolio risks are computed at prescribed frequency, and that they are communicated to all relevant stakeholders in a timely manner to facilitate business decisions;
6. Ensure development of appropriate risk control and reporting protocols and any exceedances are communicated to ROC;
7. As necessary, along with the PSO, review, revise and recommend the revised WERM Procedures for ROC approval;
8. Recommend to CFO, for approval, counterparty credit limit threshold defined as the maximum secured and unsecured credit limit that may be extended to any individual counterparty;
9. Recommend to CFO and to ROC the methodology used to establish appropriate credit for counterparties; and
10. Suspend transacting with a counterparty at any time due to concerns about the counterparty’s creditworthiness or ability to fulfill the terms of a proposed or pending transaction and inform CFO and ROC.

3.4: General Manager/Chief Executive Officer (GM/CEO)

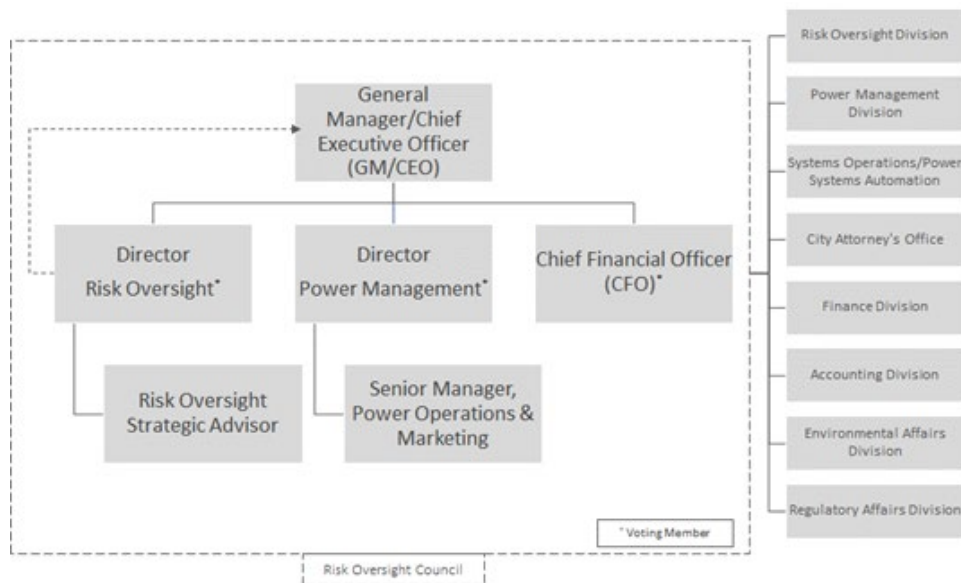
While the current policies call for the GM/CEO to delegate significant responsibilities to the ROC and the Risk Oversight Director, the GM/CEO still has the fundamental responsibility of

ensuring City Light’s compliance with WERM Policy. The GM/CEO’s responsibilities related to compliance include but are not limited to the following:

1. Ensuring adequate internal controls exist to safeguard City Light’s financial integrity and its retail customers with respect to wholesale energy purchases and sales activities;
2. Maintaining an organizational structure that ensures that all wholesale energy activities are monitored by City Light staff not directly involved in executing the transaction;
3. Resolving ROC vacancies in the best interests of the Utility while preserving the segregation of duties necessary for adequate oversight;
4. Making final decisions on risk management issues; and
5. Reviewing and endorsing the recommendations for Policy amendments to the City Council as presented by the ROC.

At the time of the adoption of this version of the WERM Policy, City Light has organized the risk management structure of the Wholesale Energy activities at City Light as shown in the figure below. This figure will be updated as necessary.

Seattle City Light Energy Risk Management Organization



4. Identify Risk and Establish Risk Limits

By participating in the wholesale energy markets, City Light is exposed to, and needs to manage, a variety of financial risks including:

- Market Risk – this risk reflects uncertainty of City Light’s financial performance due to uncertainty in commodity markets (i.e., “market price risk” and “market liquidity risk”) and uncertain price relationships (i.e., “correlations”, “basis risk” and “curve risk”).

- Volumetric Risk – the risk of financial loss due to unpredictable variations in the output of the generation fleet or in retail demand;
- Credit/Performance Risk – the risk of financial loss due to default or failure by counterparties to perform on contracts;
- Modeling Risk – the risk of financial loss due to a potentially inaccurate or incomplete characterization of a transaction or portfolio elements due to a fundamental failure of models and/or information systems to match reality sufficiently well; and
- Operations Risk – the risk of financial loss due to physical assets failing to perform or human error.

Note that these risks have all been characterized as “financial” because the policy assumes that any shortfall in the supply of power that results from any of these risks will be addressed by the purchase or sale of power from the wholesale markets, and thus be resolved at some direct financial cost. A comprehensive risk management strategy is essential to address each of these potential sources of uncertainty.

4.1: Establish Risk Limits

Accordingly, City Light’s ROC shall establish and approve risk limits for each quantifiable risk factor identified above. These limits will be documented in the Procedures Manual, see below Policy Section 9.1. Exceptions to these requirements shall only be available via ROC’s approval, see Policy Section 3.2.

5. Monitoring and Compliance

As detailed below in Policy Section 6, the current policies include specific external reporting requirements and require a regular cycle of internal and external audits to ensure City Light’s overall compliance. However, from a day-to-day operational perspective, the risk limits that will be established under Policy Section 4.1 are only valuable if City Light is regularly tracking its performance relative to these requirements. Accordingly, City Light shall develop appropriate tools for measuring, monitoring, and reporting compliance with established risk limits, and addressing circumstances when the utility temporarily falls out of compliance. The associated Procedures Manual should clearly outline such models, methods and reporting requirements.

In addition, to ensure City Light maintains ongoing compliance, City Council will rely upon both internal and external audits, when deemed necessary, to assess the performance of City Light’s risk and power management activities and report any significant findings and recommendations.

5.1: Monitor Compliance

City Light will conduct wholesale transactions in energy and related products with full awareness of its current positions in all traded products. This includes understanding the resulting risk exposure and the implications of its hedging activities.

City Light shall use appropriate models and methodologies to derive metrics applicable to assess the effectiveness of hedging strategies and to measure compliance with the relevant risk limits. City Light shall specify, measure, monitor and report on these metrics for assessing City

Light's market risk on a regular basis. Section 6 details specific reporting requirements.

5.2: Remedy Non-Compliance

In the event of non-compliance, City Light will inform Internal Audit and shall take immediate remedial measures to mitigate risks and/or provide necessary exceptions and prevent recurrence where appropriate. This may involve unwinding non-compliant positions, revising trading strategies, or adjusting risk limits.

Additionally, when severe non-compliance events occur, a thorough investigation should be conducted to identify the root cause of the non-compliance, followed by implementing corrective actions and enhancing internal controls.

Disciplinary actions, as deemed by ROC and GM/CEO, may also be considered for individuals responsible for breaches to reinforce the importance of compliance within the organization. Regular reviews and updates to Procedures Manual will ensure it remains effective and aligned with evolving market conditions and regulatory changes.

5.3: Provisions for Exceptions

There may be circumstances where non-compliance is necessary for City Light to meet its primary objective of serving load or to avail it of fair value for its customers. In such cases, the ROC can authorize temporary exceedances of established risk limits to ensure the reliable supply of electricity and that fair value is obtained for customer owned assets. These exceptions should be justified with reasoning of the necessity documented and expected duration of the exceedance. The ROC should closely monitor these situations and ensure that any risks are managed prudently. Once normal conditions are restored, City Light should promptly return to full compliance with the risk management policy.

6. Reporting

At present, City Light produces a bi-weekly report that summarizes City Light's current risk profile and the steps that have been taken to manage and mitigate these risks. This report provides the timely information that both City Light senior management and City Council staff need to track the performance of the utility's risk management structures and policies. Thus, ongoing access to this report is essential for ensuring that the policies set out here are being followed and appropriately implemented.

6.1: Reporting

The Director shall ensure that City Light prepares a periodic Risk Oversight Status Report, consistent in format and content with the example attached here as Exhibit 1. The Report shall include Policy and Procedure compliance, violations or exceptions from established risk limits, remedial action for non-compliance, resources and expected load, and forward positions with appropriate comparison between two reporting periods to show changes and/or trends in portfolio risks.

The Director or designee shall make available written and electronic copies of the current Report, immediately as it is published, to the Chair of the Sustainability, City Light, Arts and

Culture (SCLAC) Committee or its successor Council committee with City Light oversight and to relevant Council Central Staff. The ROD shall notify the Chair and relevant Council Central Staff of the availability of the current Report and include in that notification a summary of the current Report's findings.

7. Auditing and Management Oversight

To ensure that City Light maintains ongoing compliance, the City Council and Mayor will rely upon regular audits, both internal and external, to assess the performance of City Light's risk management activities. In addition, the City Council and Mayor will rely upon an affirmative responsibility of the GM/CEO, CFO, Director, and City Light's internal audit team to report any significant failures to fully implement the WERM policies. While the required audits can provide an objective assessment of such policies and procedures, ongoing management oversight and reporting obligations will ensure that the overall wholesale trading operations align with the established policies and other regulatory requirements. This dual approach not only safeguards the integrity of the established processes but also enhances transparency and accountability.

7.1: Internal Audit

Seattle City Light Internal Audit provides an independent and objective evaluation of City Light's operations. Internal Audit helps City Light achieve its objectives, comply with established rules and regulations, and improve its risk management, control, and governance processes. Internal audit reports are presented to senior management and may include recommendations for improvement. City Light's Internal Audit currently follows the standards set forth by The International Professional Practices Framework (IPPF) supported by The Institute of Internal Auditors (IIA).

City Light's Internal Audit Team will conduct an annual audit of the wholesale energy activities to ensure compliance with the WERM Policy and the associated Procedures. Using a risk-based approach Internal Audit will review current policies and procedures approved by City Light's ROC and identify areas to test for and collect evidence documenting compliance. Additionally, Internal Audit will review key information technology (IT) controls related to the Energy Trading and Risk Management (ETRM) application. These reviews may include but are not limited to the following areas:

Policy Compliance:

- Management Oversight and Authority
- Monitoring and Communication
- Transaction Limits
- Credit Management
- Separation of Duties
- Model Validation
- Record Documentation and Reporting

Energy Trading Risk Management (ETRM) System Review

- Vendor Management
- Access Controls
- Change Management

- Data Input Controls
- Business Continuity/Disaster Recovery

Internal Audit's responsibility under this annual audit policy will be fulfilled upon filing the written report of the annual audit findings with the City Clerk and notifying the Chair of SCLAC Committee or its successor committee of the filing via City of Seattle email address. The City Council intends to schedule a public briefing at the SCLAC, or its' successor, with Internal Audit to highlight their findings.

7.2: External Audit

Every five years, City Light will assess the need for an external audit with recommendation from City Light Internal Audit. Once City Light makes such determination, the Director shall clearly communicate the specific scope for the audit and its necessity to Council Staff. Once Council Staff concurs on the adequacy of the scope, City Light will commission a qualified outside consultant to perform and report on the evaluation of wholesale energy risk management activities. City Light will include in the scope of work a written report of the external audit findings and presentation to the SCLAC Committee or its successor committee.

City Light's responsibility will be fulfilled upon filing of the written report of the external audit with the City Clerk and notifying the Chair of SCLAC or its successor of the filing. The City Council intends to schedule a public briefing at the SCLAC, or its' successor, with the external auditor to highlight their findings.

7.3: Management Oversight

To ensure compliance with this Policy and associated Procedures, it is essential that there is adequate management oversight.

City Council and the Mayor's Office will explicitly rely on effective management oversight for ensuring compliance with established policies in managing financial risks. Closely monitoring operations, enforcing adherence to established policies and procedures, and proactively reporting to the City Council and Mayor's office is essential for managing financial risk and for upholding the trust in the process. Accordingly, if the GM/CEO, the CFO, Director, or City Light's internal audit team determines that there has been a failure to implement WERM Policy that has created a significant and material financial risk to City Light, they have an affirmative responsibility to inform the City Council and the Mayor of this failure.

8. Amendments to WERM Policy

8.1: Periodic review and update

Every five years from the most recent date of Council adoption of the WERM Policy by resolution, the ROC shall recommend for the GM/CEO's consideration additions, subtractions, and modifications to the WERM Policy (five-year updates).

Seattle City Council (Council) is responsible for understanding the nature of the financial risks City Light faces. Based in this understanding, Council shall adopt any additions, subtractions, or modifications to WERM Policy by resolution to direct proper measuring, monitoring, control and reporting of all risks surrounding the City Light's wholesale energy transactions.

Consistent with the process for all legislation originating in City of Seattle's Executive branch

of government, the Mayor shall review and approve any resolution proposing any additions, subtractions, or modifications to the WERM Policy before transmitting the resolution to the Council for consideration. Following Council's adoption of a resolution related to WERM Policies resolution, the Mayor may concur with the resolution.

The SMC grants City Light's GM/CEO the authority to transact in wholesale energy with various parties and for specific durations. Consistent with that authority, the GM/CEO shall review and approve any additions, subtractions, or modifications to WERM Policy before transmitting them to the Mayor for consideration and possible transmittal by resolution to the Council.

8.2: Ad hoc Amendments

All updates, revisions, and modifications to the WERM Policy are required to be reviewed and approved by the process described above in Policy Section 8.1. Such amendments should be based on the experience and expertise of City Light staff and ROC may recommend ad hoc amendments to the WERM Policy to the GM/CEO for consideration during the interim period between the five-year updates. The process for adoption of ad-hoc amendments shall be the same as for periodic updates, see Policy Section 5.1.

However, to maintain flexibility and ensure the document remains up-to-date and user-friendly in the interim period, minor edits that are not considered material or significant may be made without formal approval. These minor edits include changes to the document's format, corrections of typographical errors, organizational changes, and other stylistic adjustments. Such changes shall be documented and communicated to all relevant stakeholders, ensuring transparency, and maintaining the integrity of the Policy. Any substantive changes that could impact the risk management framework or procedures must still undergo the formal review and approval process.

8.3: Exceptions to Policy

Occasionally, opportunities may present themselves for engaging in wholesale energy activities that were not contemplated at the time of adopting the current WERM Policy. Provided that these new activities do not conflict with the provisions of the current WERM Policy, City Light may engage in these new activities upon approval by the ROC. A complete request for temporary approval submitted to the ROC shall at least include the following elements:

1. A list of all associated risks and their characteristics;
2. Supported statements of compliance with adopted WERM Policy (or non-applicability);
3. The economics of the activity should be valued according to a methodology acceptable to ROC and should be documented;
4. Unambiguous contract terms that have been reviewed and approved by the City's Attorney's Office;
5. Record of adequate training of involved support staff and their demonstrated familiarity with the proposed product; and
6. Identification of customer impact, accounting, and regulatory issues (if any) associated with the product and the means to address the issues.

9. WERM Procedures

9.1: Establishing and amending WERM Procedures

The WERM Procedures rely upon the WERM Policy but are separate from the Policy and do not require Council adoption by resolution. The GM/CEO shall delegate to the Director the responsibility to establish and revise the WERM Procedures necessary to carry out the obligations under WERM Policy, in consultation and with the approval of the ROC.

The WERM Procedures, collectively known as the “WERM Procedures Manual,” will comprehensively prescribe City Light’s standardized approach to the identification, analysis, evaluation, treatment, communication, and monitoring of wholesale energy risks. The WERM Procedures Manual shall clearly define details of transactions, limits, evaluation methods, limits, procedures, and exceptions.

Per WERM Policy, all City Light employees in relevant functional areas must comply with and acknowledge their understanding of both this WERM Policy and the associated WERM Procedures as they apply to their City Light duties.

9.2: WERM Policy is Public, WERM Procedures are Proprietary

Consistent with all Seattle legislation, the City Clerk will maintain the legislative record for the WERM Policy and make them publicly available. The WERM Policy shall be adopted by resolution in a single document attached to the resolution.

The associated WERM Procedures, however, contain proprietary information and shall be treated with greater scrutiny, subject to applicable laws. City Light may distribute the WERM Procedures Manual to persons who are not City Light personnel charged with carrying out WERM Procedures only with the documented, explicit approval of the ROC and the documented endorsement of the General Manager.

Exhibits

Exhibit 1: Example Risk Oversight Status Report, dated June 26, 2024

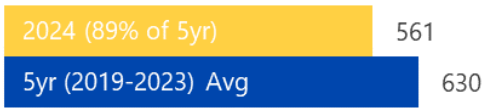
ACKNOWLEDGEMENT

| Name | Title | Sign & Date |
|--------------------|--|-------------|
| Dawn Lindell | General Manager/CEO | |
| Kirsty Grainger | Chief Financial Officer | |
| Raman Vishwanathan | Director, Risk Oversight | |
| Siobhan Doherty | Power Supply Officer | |
| Drew Grissom | Senior Manager, Power Operations & Marketing | |
| Nhung Mach | Strategic Advisor, Risk Oversight | |
| | | |

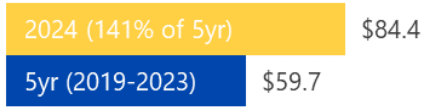
Risk Oversight Status Report As of Jun 26, 2024

Summary

SCL Hydro Generation (aMW) Boundary and Skagit



Mid-C Prices (Peak)



The current year includes actual and forecasted generation for past and future months, respectively.

The current year includes average Dow Jones firm peak index daily prices for past months and the average of the monthly forward marks for future months.

Wholesale Revenue Variance

Figure 1

Cumulative NWR for 2024
Budget vs. Forecast as of (Jun 26, 2024)
(Source: WRaR, Summary tab)

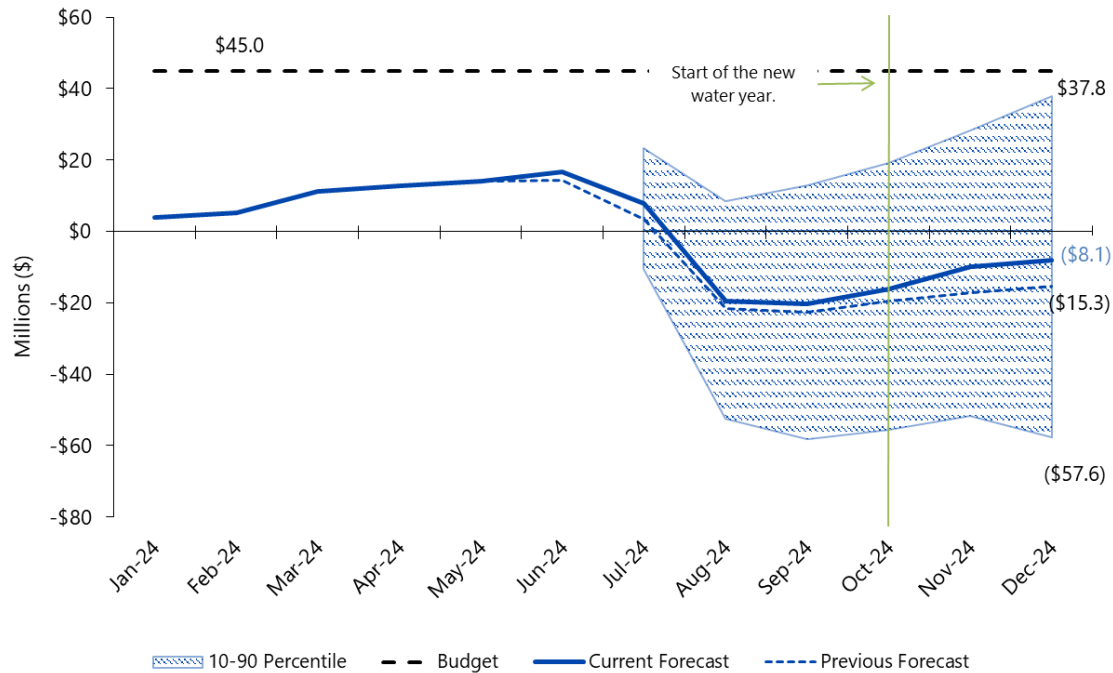
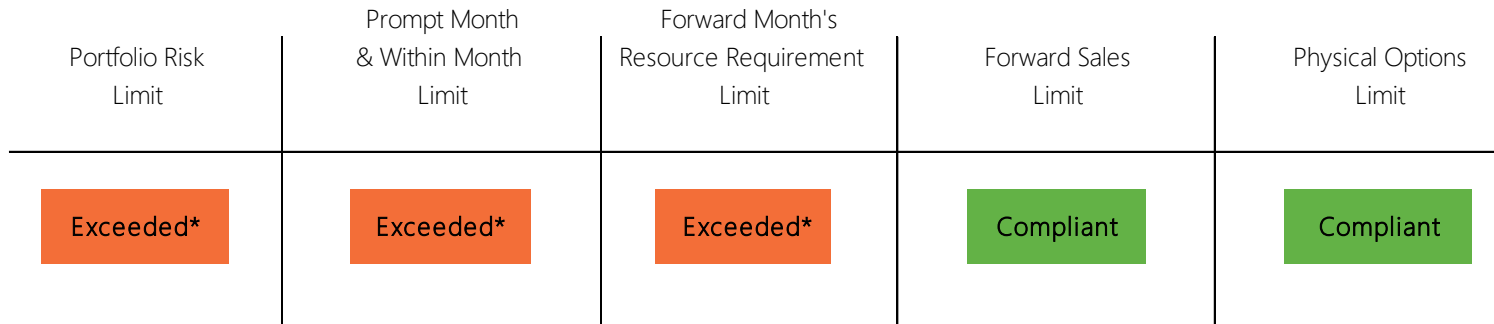


Figure 1 compares the approved 2024 NWR budget of \$45M with the latest NWR forecast of -\$8.07M. In this figure, the shaded region represents the possible NWR scenarios between the forecast's 10th (-\$57.6M) and 90th (\$37.75M) percentiles.

The NWR forecast increased by \$7.20 from the previous forecast of -\$15.27M primarily due to higher expected hydro generation at Boundary for the balance of 2024.

Policy Compliance



Portfolio Risk Limit:¹ The optimal forward hedge is calculated by maximizing the risk-adjusted expected wholesale revenues and a portfolio level Wholesale Revenue at Risk (WRaR) computation is utilized for managing and overseeing the forward hedging activities and compliance. For more information see Chart 2, Page 3.

*Based on the Jun 26th model output, the portfolio risk exceeds the established Dollar risk limit for the 2024 period. Per WERM procedures, the ROC has been informed of such exceedance and POM has been provided an exception by the ROC to monitor and execute hedging strategies as market liquidity and pricing opportunities improve. No further action is needed.

Prompt Month & Within Volumetric Limit:² POM staff will maintain City Light's power portfolio position for any prompt month or BoM period so that such position shall not exceed a 50 aMW deficit. This volumetric limit is calculated as the net position of City Light's combined physical position adjusted for any physical options (daily or monthly) that City Light has purchased for such a period.

| Period | Date | Forecasted Surplus > -50 aMW |
|--------------|--------|------------------------------|
| Within Month | Jun-24 | Compliant |
| Prompt Month | Jul-24 | Non-Compliant |

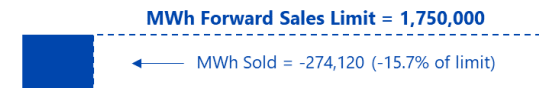
*Based on the STOMP output as of Jun 25th, the month Jul'24 has a net position deficit greater than 50 aMW. As per WERM Policy, POM staff have been notified and have plans to reduce the deficits to within 50 aMW. No further action is needed at this time.

Forward Month's Resource Requirement Limit:² For any month within the next six months, or any subsequent quarter within the next 24 months, POM staff will immediately: 1) suspend forward sales for such a period if the forecasted net combined system energy position is less than zero at the 25th percentile; and 2) purchase for such a period if the forecasted net combined energy position is less than

zero at the 50th percentile, so as to reduce the deficit to zero. For more information see Chart 3, Page 4.

*Based on the forecast as of Jun 18th, the net combined system energy for Jul-Sep, Dec 2024 and Q3'24 are each less than zero at the 25%ile, and Jul-Aug 2024 and Q3'24 are less than 0 at the 50%ile. Per WERM Policy, POM staff have plans to reduce the deficit for the months and quarters. No further action is needed at this time.

Forward Sales Limit:² POM staff will not sell forward a quantity of more than 1,750,000 net MWhs over a rolling four calendar quarters. Such a limit will be calculated as the net position of SCL's combined physical position adjusted for any physical options (daily or monthly) that SCL has purchased for such a period. Note that in the figure below, a negative amount indicates net purchases.



Physical Options Volumetric Limit:² As City Light introduces physical puts and calls into its portfolio it will do so in a conservative manner. This will allow for the refinement of procedures and controls that these transactions will impact. POM staff will limit will not transact more than the lesser of 300 aMW in physical puts and calls (including daily and monthly options) or spend more than \$2M for option premiums for any calendar year.

¹ Appendix A: Optimal Hedge, Risk Metrics and Limits (WERM Procedures)

² Appendix B: Volume and Transaction Limits (WERM Procedures)



Seattle City Light

Risk Oversight Status Report As of Jun 26, 2024

Wholesale Revenue at Risk

In December 2019, City Light implemented a risk metric named the "Wholesale Revenue at Risk" (WRaR) to measure portfolio risk and evaluate potential hedging activities. WRaR is defined as the maximum possible wholesale revenue losses at 90% confidence level due to the difference between the current hedge position and the calculated optimal hedge position.

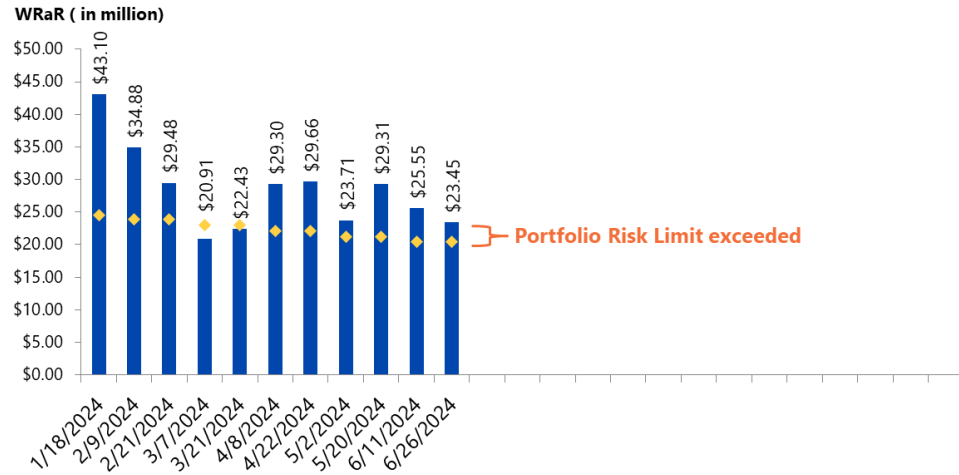
The WRaR metric is used as a risk control measure in City Light's management of surplus hydro resources. It is used in concert with additional volumetric limits, as well as expert knowledge and analysis of western wholesale energy markets, river flow data, and generation unit outages, to inform power management decisions.

Every two weeks, portfolio models are updated with the most current information and the WRaR risk metric is recalculated for the current portfolio.

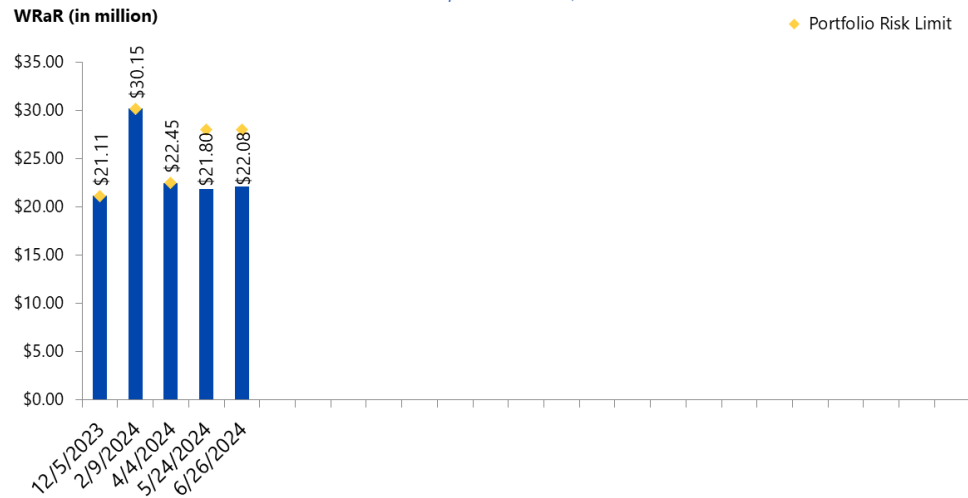
Figure 2 shows WRaR for the calendar years 2024 and 2025 by model run date. Currently the WRaR for the calendar year 2024 is \$23.45M.

Figure 2

2024 WRaR
Source: WRaR model
*Current Portfolio Risk Limit at \$20.5MM



2025 WRaR
Source: WRaR model
*Current Portfolio Risk Limit at \$28MM



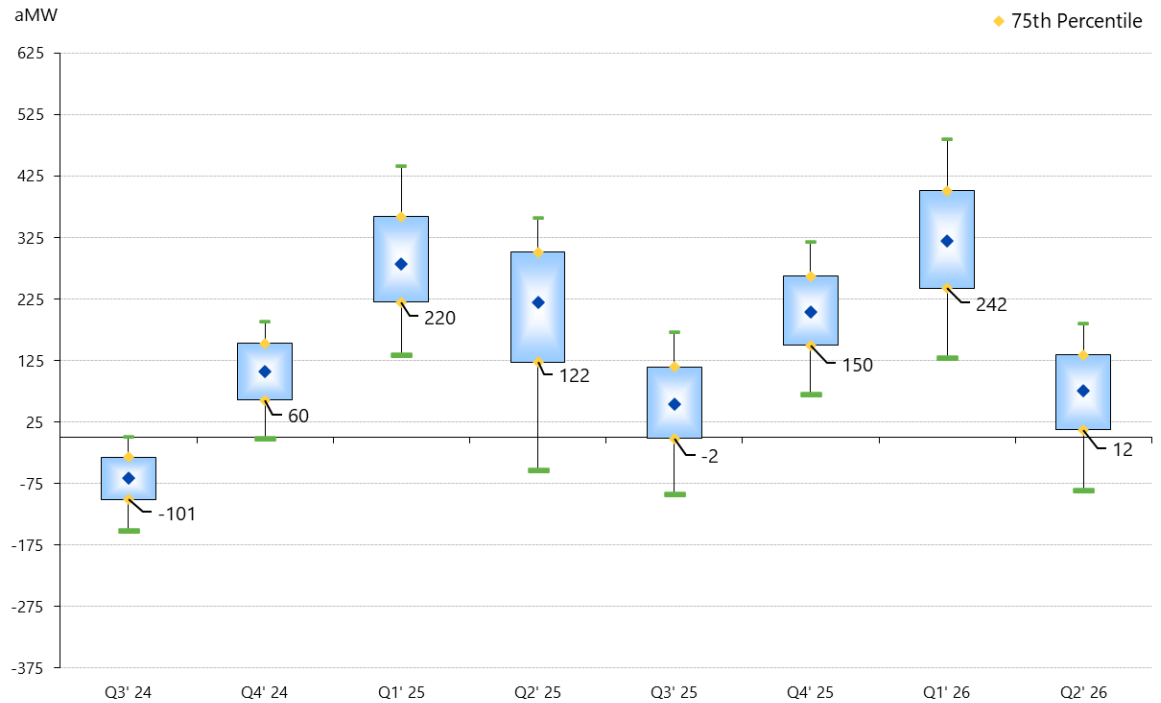
Position Status

City Light uses the most recent load and hydro forecasts including relevant historical data to run a historical simulation-based model that produces a forecast of more than two thousand portfolio resource scenarios. The output of this model along with the current forward positions provides energy information needed to determine SCL's position.

Figure 3 shows the Net Combined System Energy Position for the next quarters to match City Light's short-term transacting authority. The blue boxes represent the expected net energy position from the 25th to 75th percentiles (yellow diamonds), with the dark blue diamond inside each box representing the 50th percentile. If this blue diamond falls below zero, City Light must purchase adequate energy to cover that deficit; if the lower yellow diamond falls below zero, City Light must suspend forward sales for the period.

Figure 3
2024-26 Quarterly Forecast
Net Combined System Energy Position
as of Jun 18, 2024

- ◆ 25th Percentile
- ◆ 50th Percentile
- ◆ 75th Percentile



Credit

City Light actively manages its wholesale counterparty credit risk by:

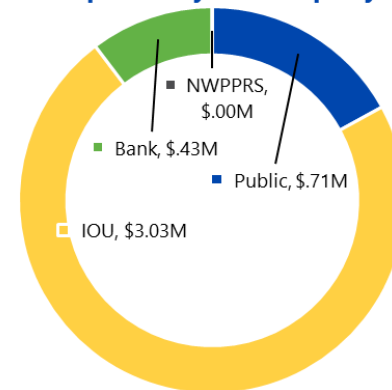
- I. setting credit limits for each counterparty that are derived from a credit limit framework, credit scoring model and analysis;
- II. securing credit enhancements when necessary;
- III. monitoring national and global news including news related to industry and specific to counterparties;
- IV. daily monitoring of counterparty credit exposures.

ROD uses industry standard tools to proactively measure changes in counterparty creditworthiness. Implied credit ratings are utilized in conjunction with standard ratings provided by external agencies. The concept of risk tolerance extends to counterparties that are considered 'Higher Risk' with equivalent Moody's and S&P implied ratings of 'Ba1' or less. Counterparties with such implied ratings are placed into the 'Higher Risk Credit Portfolio' for close monitoring in order to reduce the risk of delayed or non-payment while utilizing wholesale power, transmissions, and related ancillary revenue opportunities. City Light strives to keep its "Higher Risk" counterparty exposures at less than 25% of the total exposure at any given time. However, this percentage can vary based on the time of the month when the report is produced.

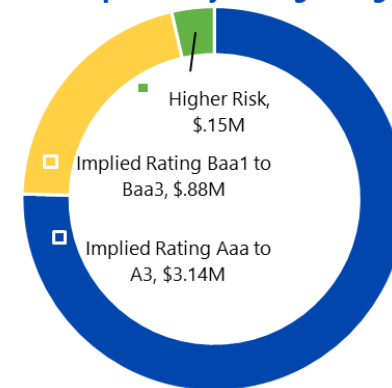
Figure 4 shows the current credit exposure by counterparty credit rating and type (as of June/26/2024).

Figure 4

Credit Exposure by Counterparty Type



Credit Exposure by Rating Category

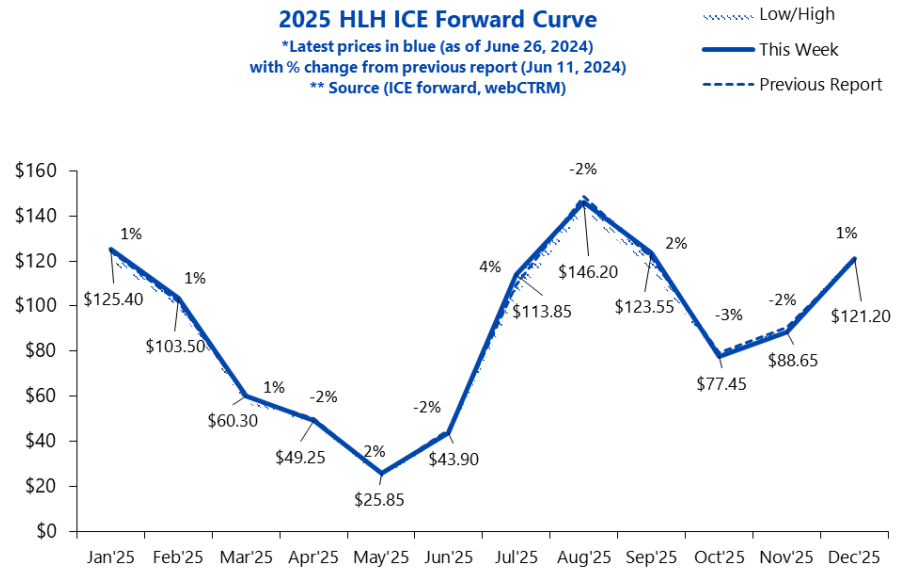
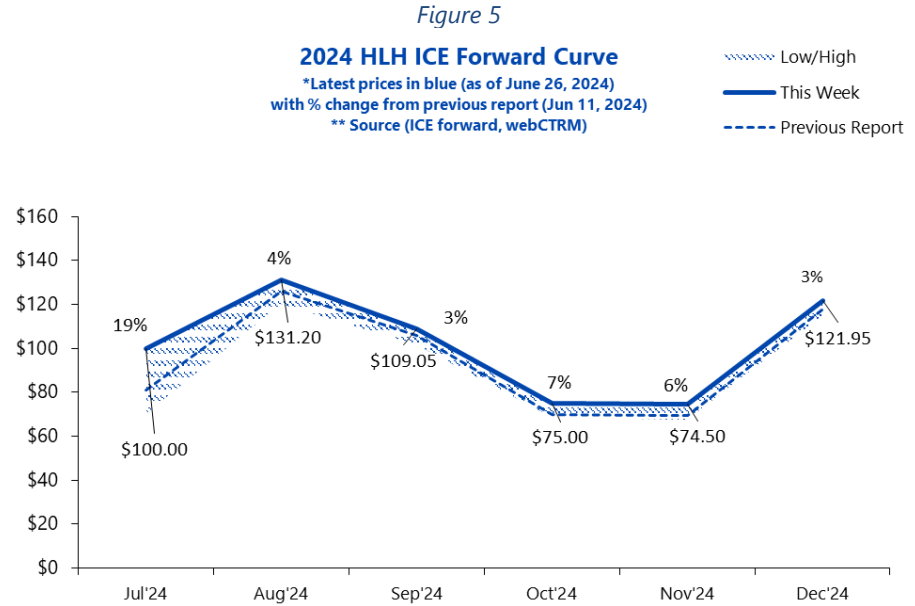


Risk Oversight Status Report As of Jun 26, 2024

Price

To ensure that prices are independently developed, City Light's official forward price curve is prepared by ICE and used for internal analysis, valuation, and modeling tasks.

Figure 5 shows the forward price range (Mid-C HLH only) for the calendar years 2024 and 2025 based on this report and the previous report, with the shaded area representing the range of forward prices between the report dates.



Acronyms

| | |
|--------------|---------------------------------------|
| aMW | average Megawatt |
| BOM | Balance-of-month |
| HERA | Hedge Evaluation & Risk Analysis |
| NWR | Net Wholesale Revenue |
| POM | Power Operations and Marketing |
| PMD | Power Management Division |
| ROC | Risk Oversight Council |
| ROD | Risk Oversight Division |
| STOMP | Short-Term Operation & Marketing Plan |
| WERM | Wholesale Energy Risk Management |
| WRaR | Wholesale Revenue at Risk |