PRESENTATION OVERVIEW

• What is SCL’s IRP Progress Report & what action is required by the City Council

• What Issues are driving the new IRP Framework

• What this means for City Light and Seattle’s energy directions and what comes next
INTEGRATED RESOURCE PLANS AND PROGRESS REPORTS

State Law, 2006 Requires City Council Approval and Public Hearing

All utilities with >25K customers

Twenty-year Resource Plan to meet forecast demand

Safe, Reliable, Clean, Equitable, Lowest Reasonable Cost

Two-year cycles (2020 Progress Report*, 2022 IRP Update, etc.)

*one-time exception

Public involvement
<table>
<thead>
<tr>
<th>Clean Energy Innovations</th>
<th>Significant growth in renewable energy and energy efficiency driving future energy supply growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Energy Transformation Act</td>
<td>New Washington law with associated rules being written</td>
</tr>
<tr>
<td>COVID-19</td>
<td>Adverse health, environmental justice, economic and energy demand impacts</td>
</tr>
<tr>
<td>Electrification</td>
<td>Climate change concerns transitioning choices and regulations in transportation and building energy use</td>
</tr>
</tbody>
</table>
Integrated Resource Plan Update

Q1 2021
- Develop Inputs and Methods

Q2 2021
- Identify Resource Needs
- Analyze Resource Choices

Q3/Q4 2021
- Identify Leading Resource Plans
- Final Public Input
- Refine and Select Plan

Q1 2022
- New “Framework”

2020 Progress Report

Integrated Resource Plan Update

Q1 2022
NEW ENERGY FRONTIER REQUIRES MORE TARGETED FRAMEWORK

Resource Needs

I-937 Energy Independence Act
- Conservation investments driving no load growth and existing I-937 compliance inventory keep compliance costs down

Clean Energy Transformation Act
- City Light close to greenhouse gas-free
- Identified new Resource Adequacy Metric and target

Resource Adequacy
- Long-run summer energy supply risk emerges
- Regional supply and demand changing and summer capacity deficits
CITY LIGHT’S CURRENT RESOURCES

2019 POWER MIX

- HYDRO ...................... 84%
- UNSPECIFIED* ........ 6%
- NUCLEAR** ................ 5%
- WIND ......................... 4%
- BIOGAS ...................... 1%

TOTAL ..................... 100%

*City Light does not have coal or natural gas resources in its power supply portfolio. It does make market purchases to balance or match its loads and resources. These purchases, along with market purchases made by Bonneville Power Administration (BPA), may incidentally include coal or natural gas resources, which are assigned to the utility. Any emissions associated with unspecified market purchases are offset through our greenhouse gas (GHG) neutrality policy.

**This fuel represents a portion of the power purchased from BPA.
NEW FRAMEWORK POINTS TO SUMMER PRESSURES
CITY LIGHT “EXPECTED” SUPPLY AND DEMAND

• Resource Adequacy assures we have sufficient supply to serve loads across a wide range of conditions

• Energy constrained for consecutive hours when hydro runs low

• Changing regional power supply requires new focus
TARGETING FUTURE RESOURCE CHOICES FOR VALUE

• Conservation meets half of our future energy needs-- may not be enough

• City Light is working with customers to add new clean fuels (wind and sun) to meet their needs

• Past IRPs concluded BPA preference power meets City Light goals — that has not changed

• Electrification and Demand Response may emerge to increase the value of our clean energy
## Preparing for the 2022 IRP

**Action Plan Priorities and City Council Involvement**

| Aligning City Light Plans | 2022 -2026 Strategic Plan (Summer 2021)  
2022 Conservation Potential Assessment (Jan 1, 2022)  
CETA Clean Energy Implementation Plan (Jan 1, 2022)  
2022 Integrated Resource Plan (Sept 1, 2022)  
Transportation Electrification Strategic Investment Plan (adopted)  
Transmission and Distribution System Plans (ongoing) |
| IRP Analysis | Resource Adequacy Needs Updates  
Adding Resource Choices to Study  
Electrification and Climate Change Scenarios |
| Public Input/Outreach | Environmental Justice Communities Centric  
Language Access  
Defining Resilience |
| Customer and Regional Collaboration | Customer Choices  
Transmission Development  
Regional Resource Adequacy Programs  
Future Bonneville Contract |

Public review / City Council 2021 approval
PREPARING FOR THE 2022 IRP
COVID-19 AND ELECTRIFICATION IMPACTS

Retail Load Forecasts

- **History**
- **2019 Forecast (IRP Input)**
- **2020 Forecast with COVID and Electrification**

Average Megawatts

Years:
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- 2026
- 2027
- 2028
- 2029
- 2030
- 2031
- 2032
- 2033
- 2034
- 2035
- 2036
- 2037
- 2038
- 2039
- 2040
THE NEW ENERGY FRONTIER
ADAPTING TO CONSTANT CHANGE

• Stable and fair rates
• Flexible and adaptable plans
• Environmental justice
• Well informed and involved customer owners and public
THANK YOU TO OUR IRP TECHNICAL ADVISORS

• Brian Fadie, Northwest Energy Coalition
• Elizabeth Osborne, NW Power & Conservation Council
• Joanne Ho, Consultant
• Joni Bosh, Northwest Energy Coalition
• Jeremy Park, University of Washington

• John Fazio, NW Power & Conservation Council
• Mike Ruby, Envirometrics
• Paul Munz, Bonneville Power Administration
• Steve Gelb, Emerald Cities
• Wesley Lauer, Seattle University
MISSION
Seattle City Light provides our customers affordable, reliable and environmentally responsible energy services.

VISION
Create a shared energy future by partnering with our customers to meet their energy needs in whatever way they choose.

VALUES:
- Customers First
- Environmental Stewardship
- Equitable Community Connections
- Operational and Financial Excellence
- Safe and Engaged Employees