

#### SEATTLE CITY COUNCIL

#### **Transportation and Utilities Committee**

#### Agenda

Wednesday, February 3, 2021

9:30 AM

**Public Hearing** 

Remote Meeting. Call 253-215-8782; Meeting ID: 586 416 9164; or Seattle Channel online.

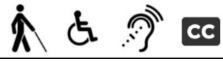
Alex Pedersen, Chair Dan Strauss, Vice-Chair M. Lorena González, Member Lisa Herbold, Member Tammy J. Morales, Member Debora Juarez, Alternate

Chair Info: 206-684-8804; <u>Alex.Pedersen@seattle.gov</u>

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#### SEATTLE CITY COUNCIL Transportation and Utilities Committee Agenda February 3, 2021 - 9:30 AM Public Hearing

#### **Meeting Location:**

Remote Meeting. Call 253-215-8782; Meeting ID: 586 416 9164; or Seattle Channel online.

#### **Committee Website:**

http://www.seattle.gov/council/committees/transportation-and-utilities

This meeting also constitutes a meeting of the City Council, provided that the meeting shall be conducted as a committee meeting under the Council Rules and Procedures, and Council action shall be limited to committee business.

In-person attendance is currently prohibited per Washington State Governor's Proclamation 20-28.15, until the COVID-19 State of Emergency is terminated or Proclamation 20-28 is rescinded by the Governor or State legislature. Meeting participation is limited to access by telephone conference line and online by the Seattle Channel.

Register online to speak during the Public Comment period at the 9:30 a.m. Transportation and Utilities Committee Meeting at <a href="http://www.seattle.gov/council/committees/public-comment">http://www.seattle.gov/council/committees/public-comment</a>.

Online registration to speak at the Transportation and Utilities Committee Meeting will begin two hours before the 9:30 a.m. meeting start time, and registration will end at the conclusion of the Public Comment period during the meeting. Speakers must be registered in order to be recognized by the Chair.

Submit written comments to Councilmember Pedersen at <u>Alex.Pedersen@seattle.gov</u> Sign-up to provide Public Comment at the Meeting at <u>http://www.seattle.gov/council/committees/public-comment</u> Watch live streaming video of the meeting at <u>http://www.seattle.gov/council/watch-council-live</u> Listen to the meeting by calling the Council Chamber Listen Line at 253-215-8782 Meeting ID: 586 416 9164 One Tap Mobile No. US: +12532158782,,5864169164# Please Note: Times listed are estimated

- A. Call To Order
- B. Approval of the Agenda
- C. Public Comment
- D. Items of Business
- 1. <u>Appt 01788</u> Appointment of Dennis Gathard as member, Levy to Move Seattle Oversight Committee, for a term to December 31, 2023.

Attachments: Appointment Packet

Briefing, Discussion, and Possible Vote

**Presenter:** Rachel McCaffrey, Seattle Department of Transportation (SDOT)

2.	<u>CB 119989</u>	AN ORDINANCE relating to the Your Voice, Your Choice program; authorizing the Director of the Seattle Department of Transportation (SDOT) to acquire, accept, and record, on behalf of The City of Seattle, an easement for street purposes from Seattle School District No. 1, a municipal corporation of the State of Washington, situated in a portion of the Tract described as "Reserve" in the Plat of S.P. Dixon's Green Lake Acre Tracts; designating the easement for street purposes; placing the real property rights under the jurisdiction of SDOT; and ratifying and
		property rights under the jurisdiction of SDOT; and ratifying and confirming certain prior acts.

<u>Attachments:</u> <u>Att A - Recorded Easement for Street Purposes granted by Seattle</u> School District No. 1

<u>Supporting</u>

Documents:

Summary and Fiscal Note Summary Ex 1 - Vicinity Map Summary Ex 2 - Project Area Presentation

Briefing, Discussion, and Possible Vote

Presenters: Gretchen Haydel and Joel Darnel, SDOT

3.	<u>Res 31986</u>	A RESOLUTION relating to the City Light Department;
		acknowledging and approving the 2020 Integrated Resource Plan
		Progress Report as conforming with the public policy objectives
		of The City of Seattle and the requirements of the State of
		Washington; and approving the Progress Report for the biennium
		September 2018 through August 2020.

<u>Attachments:</u> <u>Att 1 - Seattle City Light 2020 Integrated Resource Plan Progress</u> <u>Report</u>

Supporting
Documents: Summary and Fiscal Note

**Presentation** 

Public Hearing, Briefing, and Discussion

**Presenters:** Debra Smith, General Manager and CEO, Emeka Anyanwu, Joy Liechty, Aliza Seelig, and Maura Brueger, Seattle City Llght

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#### E. Adjournment



Legislation Text

#### File #: Appt 01788, Version: 1

Appointment of Dennis Gathard as member, Levy to Move Seattle Oversight Committee, for a term to December 31, 2023.

The Appointment Packet is provided as an attachment.

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# City City

City of Seattle Boards & Commissions Notice of Appointment

Appointee Name: Dennis Gathard						
<b>Board/Commission Name</b> : Levy to Move Seattle Oversight Committee (Ord §9)	dinance 124796, <b>Position Title:</b> <i>Position No. 6 (and licensed engined</i>					
Appointment <i>OR</i> Reappointment	Council Con					
Appointing Authority:         Council         Mayor         Other:         Fill in appointing authority	Term of Pos 1/1/2020 to 12/31/2023		: * Ing term of a vacant position			
Neighborhood: Fremont	<b>Zip code:</b> 98107		tact Phone No.:			

#### Background:

Ordinance 12496, Section 9, provides: "The Oversight Committee shall consist of 16 members: a City Council member (the Chair of the City Council's Transportation Committee or its successor committee with responsibility for transportation); the City Budget Director; one representative each chosen by and from among the respective members of the Seattle Pedestrian Advisory Board, Seattle Bicycle Advisory Board, Seattle Transit Advisory Board, and Seattle Freight Board; five Seattle residents appointed by the City Council, <u>including a</u> <u>licensed engineer with bridge and structures experience</u>; and five Seattle residents appointed by the Mayor and subject to confirmation by the City Council" (emphasis added). This appointee fulfills the requirement for the "licensed engineer with bridge and structures experience.

Mr. Gathard is a licensed civil and structural engineer (WA #19384). He has worked on a variety of project types conducting civil, structural, and hydraulic engineering, environmental studies, and permitting for over 35 years. He has acted in the role of lead design engineer, lead structural engineer, project engineer, project manager, and principal for 28 of those years. Gathard has acted as Project Manager/Engineer for design contracts with the Washington State Department of Transportation and the Seattle Department of Transportation designing new bridges and bridge repairs. His experience also includes over four years of construction management for bridge and elevated transportation construction projects in the U.S. and Canada. Mr. Gathard has expertise in concrete design and construction, and was an instructor for prestressed concrete design at the University of Washington.

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Authorizing Signature (original signature):	Appointing Signatory:						
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Date Signed (appointed): January 5, 2021

#### Dennis Gathard, P.E., S.E.

#### <u>Education</u>

#### **Professional Registrations**

University of Illinois - BSAeronautical Engineering, 1971Civil and Structural EngineeringUniversity of Illinois - MSCivil/Structural Engineering, 1976WA #19384 CA #C 60750

Dennis Gathard is a licensed civil and structural engineer in the states of Washington and California. Mr. Gathard has worked on a variety of project types conducting civil, structural, and hydraulic engineering, environmental studies, and permitting for over 35 years. He has acted in the role of lead design engineer, lead structural engineer, project engineer, project manager, and principal for 28 of those years. He has acted as a sole proprietorship consultant since 1996. His primary areas of expertise are civil, hydraulic, and structural engineering. He has also been actively involved in environmental restoration projects including dam removal, sediment analysis, water quality analysis, and river restoration.

In 1989 Mr. Gathard began investigations that led to the decision to remove two dams and restoration of the Elwha River in western Washington State. Since that time he has been involved in numerous dam removal projects including Edwards Dam on the Kennebec River in Maine; Milltown Dam on the Black Foot and Clark Fork Rivers in Montana; Condit Dam on the White Salmon River in southern Washington state; four dams on the Klamath River in California; and numerous other dam removal and river restoration projects throughout the United States. He was a member of the American Society of Civil Engineers Task Committee on Guidelines for Retirement of Dams and Hydroelectric Facilities, which produced the first set of specifications for dam removal, entitled *Guidelines for Retirement of Dams and Hydroelectric Facilities*.

Dennis Gathard also has over 10 years experience in water front structure design and construction management. He was Project Manager for the upgrade and repairs of several terminal facilities for the Port of Seattle including the repairs of seawalls at Piers 90 and 91. Mr. Gathard has special expertise in concrete design and construction, and was an instructor for prestressed concrete design at the University of Washington. Prior to graduate studies in Civil Engineering, Mr. Gathard was a plant construction engineer for a large soy processing plant in Illinois for three years and a union carpenter for one year.

He has also acted as Project Manager/Engineer for the design contracts with the Washington State Department of Transportation and the Seattle Department of Transportation designing new bridges and bridge repairs. His experience also includes over four years of construction management for bridge and elevated transportation construction projects in the U.S. and Canada. Mr. Gathard has expertise in concrete design and construction, and was an instructor for prestressed concrete design at the University of Washington.

Major consulting engineering firms Mr. Gathard has worked for include Parsons Brinckerhoff, Berger ABAM, Sverdrup, and Summit Technology.





#### Brief Overview of Sediment Testing, River Restoration, and Dam Removal Project Work:

- Wrote *Klamath River Dam and Sediment Investigation* report. Dam removal plan was submitted to FERC in November 2006. Conducted sediment volume, grain size, and chemical analysis of sediment trapped behind Iron Gate, Copco 1, and J.C. Boyle dams on the **Klamath River** in northern California.
- Has worked on removal of Elwha River Dams since 1989. Wrote the *Report to Congress* used in EIS for dam removal and river restoration plans. Investigated plan to place sediment on upper river banks along Elwha River. Wrote sediment testing plan and conducted sediment volume and grain size characterization, sediment transport, groundwater withdrawal, and fisheries facilities analysis and design for the **Glines Canyon and Elwha** dams near Port Angeles, WA. Continues to act as technical oversight for Lower Elwha Klallam Tribe.
- Conducted all engineering task from initial conception to EIS phase through final design for the Condit Dam Removal Project including dam removal, sediment volume and grain size analysis, sediment transport analysis, mercury contamination and water analysis, and suspended sediment analysis of for **Condit Dam** in Bignen, WA. Project began in 1998 and continues to act as technical consultant to PacifiCorp for dam removal.
- Developed dam removal concepts used in the removal of Milltown Dam near Missoula, MT. Conducted dam safety investigation that led to dam removal decision for **Milltown Dam** near Missoula, MT. Acted as Missoula County's consultant for technical over sight for sediment removal and river restoration activities. Sediment was removed from the reservoir and stored either on site or at a remote upland location for this project.
- Developed sediment testing, characterization, and dredging plan for Lafarge Cement, Seattle Plant, in 2009.
- Developed initial concepts for removal of San Clemente Dam which involved on site relocation of reservoir sediment, water quality mitigation approaches, and fish passage alternatives for **San Clemente Dam** near Carmel, CA.
- Review of sediment characterization, water quality protection, sediment transport, and structural analysis for **Matilija Dam** near Ventura, CA.
- Conducted removal analysis on Edwards Dam in Augusta, ME. Developed dam removal approach and costs for removal. Cost analysis was within 5% of actual costs.
- Developed the preliminary design for dam removal and sediment stabilization techniques for removal of **Goldsborough Dam** near Shelton, WA. The project required routing Goldsborough Creek through the sediment deposited behind the dam.
- Flood protection and structural analysis of Jackson Dam in Hardwick, VT
- Conducted review of Corps of Engineers approaches to remove four dams (Ice Harbor, Little Goose, Lower Monumental, and Lower Granite) on the lower Snake River in Washington State for the Columbia River Inter Tribal Fisheries Council.
- Review of removal for Soda Springs Project in southern Oregon for Pacificorp.
- Review of plans for upgrade of PG&E facilities on Battle Creek near Red Bluff, CA



- Analyzed power production requirements for **Peterson Dam**, in central Vermont, and developed removal approaches.
- Turbine passage survival study for all of the dams on the Columbia and Snake Rivers.
- Developed sediment volume characterization and dam removal techniques for removing the Big Bend Dam on the Feather River in northern California.
- Conducted structural design for passage facilities for downstream migrants at **Bonneville Dam** on the Columbia River.





Skokomish River Bridge Removal and Bank

*Stabilization – Seattle City Light* Mr. Gathard was project engineer for the removal of Forest Service bridge and stabilization of river banks. The project involved stabilizing a bridge abutment and river bank during an aggressive degradation of the river during spring flow.

*Milltown Dam Removal – Missoula County Health Department* Mr. Gathard reviewed the FERC part 12 report for the Milltown Dam for the City/County of Missoula, MT. His analysis was involved in the final decision to remove the Milltown Dam. This dam has been removed and river restoration has begun. He has acted as technical consultant reviewing sediment transport, construction plans, environmental review documents, and numerous other aspects of this river reconstruction project for the county since 1999.

#### San Clemente Dam Removal Project – California State Coastal Conservancy

Mr. Gathard proposed several structural removal approaches and reviewed sediment removal and fish passage alternatives for San Clemente Dam EIS analysis. Project is located near Carmel, CA

San Clemente Dam Removal Project – California

*State Coastal Conservancy* Investigated water quality protection, sediment transport, and structural analysis for **Matilija Dam** near Ventura, CA

#### Klamath River Dam Removal Investigation Project – California State Coastal Conservancy

Mr. Gathard conducted a feasibility study of removing four dams on the Klamath River in OR and CA. The focus of the study was sediment testing and stabilization. This study also provided construction methodologies, water quality impact analysis, construction cost, and construction schedules for the removal and mitigation work required. The report was submitted to FERC in November 2006.

Review of Corps of Engineers approaches to removal of four dams (Ice Harbor, Little Goose, Lower Monumental, and Lower Granite) – Columbia River Inter Tribal Fisheries Council Acted as technical consultant for dam removal analysis by the Corps of Engineers.

#### Elwha River Restoration Project – Lower Elwha

Klallam Tribe - The Elwha dam removal investigation began in 1989. This project is expected to be finished in 2112. Developed the Report to Congress, Environmental Impact Statement, and River Restoration Implementation of Elwha River Restoration Project for Lower Elwha Klallam Tribe. The project developed into investigation of means of removing the two dams on the river to restore native fishing rights, provide better flood protection, develop new sanitary sewage systems for the tribe, provide new water supplies for tribal domestic and fish hatchery uses, and provide domestic and industrial water diversion and supply facilities for the City of Port Angeles. Technical aspects of the project include reviews of dam safety for both dams, development of basin hydrology, design of hydraulic structures, flood analysis and levee design, sediment transport analysis, beach protection design, and dam project operations analysis.

Flooding and Beach Erosion Mitigation Alternatives Analysis - Lower Elwha Klallam Reservation Lower Elwha Klallam Tribe Principal and Project Manager for investigation of flooding impacts and feasibility study of flood and beach erosion mitigation options for Tribe. Project involved analysis of dam operations, river hydrology, river morphology analysis, sediment transport analysis, groundwater investigations, and domestic water supply analysis.

**Condit Dam Removal Investigation - Pacificorp** -Conducted sediment removal analysis. PacifiCorp is currently in the process of removal of this 97 year old 100 foot high concrete dam on the White Salmon River in Washington State. Mr. Gathard was responsible for analysis of sediment removal techniques and river impacts of dam removal. He has also developed mitigation alternatives for downstream impacts to water users for the US Bureau of Indian Affairs and related Tribes. Mr. Gathard has also been involved in structural evaluation of the dam removal techniques.



*Edwards Dam Removal Investigation* Mr. Gathard was Project Manager for alternatives analysis of removal techniques or fisheries by-pass for this timber crib and concrete dam. This 850-foot-long, 24-foot-high, timber-and-crib dam, located in Augusta, Maine was removed in 1999 using the methods and for the cost outlined in the report we produced this project. In response part of the FERC Draft Environmental Impact Statement for the Kennebec River Basin, we developed a dam removal analysis report for the Kennebec Coalition that provided a method to remove the dam.

Goldsborough Dam Removal Investigation -Simpson Timber Company Project Manager for investigation of removal and by-pass alternatives for a small hydroelectric dam constructed on Goldsborough Creek in Mason County, Washington in 1921. Mr. Gathard was project manager and engineer for alternatives analysis studies including fish by-pass (ladders) alternatives and removal alternatives. Tasks included techniques for diversion of the stream, fish ladder design, studies of dam removal, and analysis of sediment impacts from removal. The project is currently in the permitting phase of development.

**Peterson Dam Investigation – Trout Unlimited** GEC investigated power production capacity, and river restoration for the Peterson Dam, approximately 350 foot-long, 55-foot-high, concrete dam, located near Burlington, VT. Peterson Dam is one of four dams included in the Lamoille Project, Federal Energy Regulatory Commission (FERC) License Number 2205 owned by Central Vermont Public Service Corporation (CVPS). Peterson dam is the first dam upstream of the mouth of the Lamoille River at Lake Champlain. GEC provided engineering and economic analysis of removal options and environmental and economic impacts.

Holter Dam Flashboard Replacement Feasibility Study – Trout Unlimited GEC investigated several approaches for flashboard removal and replacement for this 82 year old FERC regulated straight concrete gravity structure located near the head waters of the Missouri river about 43 miles north of Helena Montana, Holter Dam captures water from a drainage area for the dam is 17,150 square miles. Engineering tasks involved development of natural river flows, power production capacity analysis, spillway hydraulic analysis, structural analysis and design of floating cofferdam structures, cost analysis, and dam structure analysis. GEC provided several alternative approaches to reservoir drawdown proposed by the dam owners. Reservoir drawdown would result in fish population reductions, economic impact to surrounding communities, and recreation losses.

Bonneville Dam 1st and 2nd Powerhouses; Conceptual Layouts for Construction of Juvenile Fish Monitoring Facilities - National Marine Fisheries Service Provided conceptual drawings with opinion of costs for collection and monitoring of downstream migrating salmonids from the powerhouse bypasses. Also made recommendation and developed preliminary design for the preferred alternatives at each dam.

Bonneville Dam 1st and 2nd Powerhouses Juvenile Fish Monitoring Facilities - National Marine Fisheries Service Project engineer responsible for assisting in the study of juvenile fish monitoring facilities. The study was conducted to assess concepts and feasibility of constructing juvenile fish monitoring facilities at both 1st and 2nd Powerhouses. Several alternatives were developed for each. A preferred alternative was selected and developed for consideration. The study estimated construction cost to be approximately \$10 million, not including visitor facilities.

Deschutes River Juvenile Rearing Facilities Study -Washington State Department of Fish & Wildlife Project Manager responsible for conducting analysis of several streams along the Deschutes River for potential location of rearing facilities construction sites. Project involved hydrological analysis of streams and river, natural spawning and rearing habitat evaluation, site location studies, water quality studies, and constructibility studies. Issues involved siting the facility for best water use, access, reliability and utility accessibility.

*Toutle River Hatchery Feasibility Study -Washington State Department of Fisheries* Project manager for study involving a complete hatchery siting and redevelopment of a partially abandoned Chinook and Coho hatchery. The hatchery feasibility study included extensive river hydrology, water intake, and transportation design. **NOAA Montlake Facility Environmental Site** Assessment - Conducted study to determine the source and extent of a petroleum product discharged onto Lake Washington's Portage Bay. Based on the investigation, a report was prepared describing extent of contamination caused by a leaking bunker oil fuel supply line. Proposed methods of clean-up, and periodic sampling and monitoring were also presented.

#### Salmonid Enumeration Facility - Lower Elwha

*Klallam Tribe* Project Manager responsible for conducting facility design and hydraulic analysis of several streams along western Straight of Juan de Fuca for potential location of enumeration facilities construction sites. Project involved hydrological analysis of streams and rivers, natural spawning and rearing habitat evaluation, site location studies, fish passage structures design, water quality studies, and utilities access and constructibility studies. Issues involved siting the facility for best site access, least cost structure design, water use, and reliability and utility accessibility.

*Owl Creek Rearing Station Study - HOH Native American Tribe* Project Engineer responsible for the design of four 100-foot long raceways, river intake structure, 1200 lf of 24-inch diameter pipeline, fishway, pollution abatement pond and associated buildings.

Wishkah Hatchery Expansion - Washington State Department of Fisheries - Project Engineer responsible for conducting a study and submitting recommendations for the expansion of the existing hatchery. As a result of the study, the existing hatchery was modified to facilitate Chinook salmon and steelhead trout in an incubation capacity. This project provided operation and maintenance instructions to the hatchery staff.

John's Creek Hatchery - Washington State Department of Fish & Wildlife Project Manager responsible for site work and piping required to modify the Hatchery water intake system piping, equipment building and electrical grid necessary to disinfect the water supply. The facility required installation of new piping, valves, controls and safe operating electrical systems. At John's Creek Hatchery "salmon poisoning disease" (Nanophyetus salmincola) infestation called for the installation of an electric grid for control of a water borne parasite. Dissolved Gas Abatement Study Phase II- U.S. Army Corps of Engineers, Walla Walla District Project Engineer responsible for preliminary design and analysis of deeply submerged passageway alternative for fish passage at John Day and Ice Harbor dams. Project involved creating large diameter low level outlets for fish passage to reduce dissolved gas levels. Design involved structural, hydraulic, cost, schedule, and construction analysis to create openings in existing structures.

#### Design of Juvenile Bypass Facilities at The Dalles Lock & Dam - U.S. Army Corps of Engineers,

**Portland District** Project Structural Engineer assisting with the development of studies, plans, specifications and cost estimates relating to flume design to improve passage of juvenile fish. The system under design will intercept downstream migrant juvenile fish from the turbine intakes and divert them to a collection channel. The migrant fish and water will pass through a dewatering facility and then be transported by flume across the spillway. They will continue downstream to the juvenile evaluation facilities and then into the Columbia River. The project includes architecture, and hydraulic engineering, as well as civil, structural, mechanical and electrical engineering.

#### IDTC, Hydraulic Engineering Design Services,

**Delivery Order No. 4** - Turbine Passage Study - U.S. Army Corps of Engineers, Portland District Project Manager responsible for conducting a baseline turbine study which involved working with agency engineers and biologists in collecting as-built plans and operating information regarding flow range, head efficiency, intake, wheel case, draft tube and water passage characteristics of the turbine unit to the passage survival of juvenile fish. The work was conducted with professor emeritus, Milo Bell. The following dams have been evaluated: Bonneville Powerhouse I and II, The Dalles Dam, John Day Dam, McNary Dam, Ice Harbor, Priest Rapids, and Big Cliff.

#### West Seattle Bridge -City of Seattle

Mr. Gathard was senior structural design engineer for prestressed concrete main span and concrete approach spans of the West Seattle Bridge. He later became project engineer for Moseman Construction for the construction of the east interchange approach to the bridge.

#### Emerson Street Viaduct Seismic Retrofit - Seattle Engineering Department

Project Manager responsible for conducting full seismic retrofit of a 12-span "lifeline" viaduct. Project included seismic and cost analysis of alternate methods for upgrading the bridge to withstand a seismic event. Comparison of ATC-6 "stiff" and newly developed "flexible" approaches to retrofit were presented, allowing for a much less costly retrofit.

#### South Fork Tolt River Bridge - Seattle City Light

Project Manager responsible for the design of a single span 225 foot steel inverted bowstring truss bridge. The bridge was designed to carry wind, snow, and earthquake loads, in addition to loads from a 66-inch diameter penstock for downstream power turbines. Bridge supports utilize grouted post-tensioned high strength bars to resist seismic loading

#### Seismic Retrofit Projects. - Washington State Department of Transportation (WSDOT)

Project Manager for seismic retrofits of 21 bridges located on I-90 Seattle, I-5 Central Seattle, and SR2 in Everett. This design project was accomplished in three construction projects at a cost of approximately \$3,500,000. It is the first level of effort in providing restraint for lateral loads imposed due to a seismic event. Follow-on efforts will provide additional lateral strengthening. Work included dynamic analysis, design, and contract document preparation. Mr. Gathard managed a team of 8 engineers and drafters to.

#### Seismic Retrofit Projects. City of Seattle

Project Manager for the preliminary design of seismic retrofit of 17 bridges in Seattle. Project included reviewing bridge retrofit options, preparing preliminary designs and cost estimates. Middle Noocksak River Bridge - Seattle City Light

Project Manager responsible for emergency repair of prestressed concrete logging bridge located on the South Fork Noocksack River. High flows in 1995 water year caused extensive erosion beneath the footing of the north bridge abutment. Repair solutions included jacking and installation of sheet piles and concrete. Project involved hydrological analysis of the river, natural spawning and rearing habitat evaluation, Structural analysis and design of bridge foundation repairs, water quality studies, and constructibility studies.

#### Petty's Island Access Bridge - Citgo Petroleum

\$2.5 million bridge widening project including an existing one-quarter mile long bridge constructed with prestressed box girders on prestressed concrete piles. The project included demolition of a 1250-foot long railroad bridge with a 100' bascule span.

#### Little White Salmon Bridge - SR14- WSDOT

Mr. Gathard was Project manager leading a design team of three structural engineers and two technicians for the design of a three span steel girder replacement bridge over the Little White Salmon River in southern Washington State. The project also included removal of the existing steel structure and construction of a 30 foot high concrete tied back retaining wall.

#### Parking Garage - Seattle Center

Project Manager for structural preparation of condition report and design of seismic retrofit for 30year-old pre-cast concrete parking structure. Report included condition survey and recommendations for structural upgrade.

#### Access Bridges at Jacksonville, FL, Mobile, AL, Lake Charles, LA, Petty Island, NJ -

Project engineer responsible for load rating of facilities used for loading tri-level barges.

#### Bridge Seismic Retrofit Program, Phase II Needs Assessment Study - Seattle Engineering Department

Project Manager for assessment of seismic vulnerability of 17 significant bridges in the City of Seattle. The project is divided into two parts, ten bridges constructed prior to 1936 and seven bridges constructed after. The bridges vary in structural complexity from simple spans to large concrete arch structures of architectural significance.

#### Bull Frog Road Bridge over Cle Elum River -Kittitas County Department of Public Works

Analyzed and load rated existing bridge, retaining walls and abutments for this 3 span, 200' long steel bridge. Also prepared analysis programs for future special loadings for County.

#### Concrete Loading Ramp Rehabilitation - Crowley Transportation Services

Mr. Gathard acted as Project Manager for the condition survey and rehabilitation design of this two level 300 foot long concrete tractor trailer loading ramp structure. The project involved providing an initial condition survey, analysis, recommendations and cost estimates followed by a rehabilitation design including design of temporary traffic access ramp, traffic rerouting, moisture protection overlay, concrete repair, and construction phasing.

#### San Juan Terminal Access Bridge -

Project engineer for redesign of access bridge. Project required analyzing and redesign existing bridge decks which demonstrated poor service. Analysis resulted in bridge deck reconstruction.

#### Cooper River Bridge - Plum Creek Timber Company

Project manager of an engineering effort to maintain traffic on a U.S. Forest Service bridge impacted by 1990 winter floods. The study and design required significant analysis of the existing structure and field investigation.

#### Access Bridge, Mobile, AL

Project engineer for design of structural steel truck loading bridge, approximately 300 foot long.

#### Sutro-Kirman Bridge Over Truckee River

Designed 20' high abutments and retaining walls for this 210' - 2 span bridge using AASHTO Guidelines.

#### Pacific Terminal Limited Concrete Apron - Crowley Maritime

Analyzed existing prestressed concrete apron for special crane loadings. Apron is constructed of prestressed concrete planks supported on prestressed concrete piles. Produced computer program allowing crane loads to be analyzed for any crane orientation.

#### Structural Design Criteria - Government of Ontario Advanced Light Rapid Transit System ( GO ALRT) - Ontario, Canada

Dennis was Project Engineer for the development of structural portion of the *Design Criteria* for the development of the light rail system for the Government of Ontario. The design criteria included design guidelines for elevated and at grade elements of the system including analysis and design criteria for rail-structure interaction forces.

#### Skytrain Transit System - Vancouver, B.C.

Senior designer for design and construction of approximately 13 miles of at grade and elevated dual track guideway for numerous stations. System designed to handle approximately 25,000 people per hour, maximum.

#### Central Automated Transit System - Detroit, MI

Project Engineer for three miles of elevated guideway developed for UTDC, Toronto. Work included field inspection and construction of box beams. Project included 173 bridge beams - all prestressed, precast in concrete, curved box beams.

#### Los Colinas People Mover - Irving TX

Mr. Gathard was Project Engineer for the development and upgrade of the prestressed concrete channel section, which carries an elevated people mover for the planned community of Los Colinas. Project included design and construction management for the aerial system.

#### MATRA Transport System, Lille, France - MATRA SA

Mr. Gathard wrote the design criteria and acted as design engineer for the team, which prepared a costfeasibility-alternatives analysis for the design, of Lille's elevated transport system. The project involved development of design criteria, design and preparation of contract documents for elevated precast concrete beams used as the system guideway. Work also included design of columns and affected utilities.

#### Access Bridges at Jacksonville, FL, Mobile, AL,

*Lake Charles, LA, Petty Island, NJ* -Project engineer responsible for load rating of facilities used for loading tri-level barges.

#### SR547 Retaining Wall - Washington State Department of Transportation

Project Manager responsible for overseeing the replacement of this 200 foot long tied retaining wall. This project involved the construction of a new wall along the highway while maintaining traffic.

#### PAPERS

Gathard, D. R. Engineering Techniques for Condit Dam Removal American Society of Civil Engineers, ASCE July 19-22, 2005, Williamsburg, VA

Peter Nielsen, M.S., R.S Dennis Gathard, P.E., *Issues* contributing to the decision to remove the Milltown Dam, US Dams Conference, April 2004

Guerre J., Gathard, D.R., *Implications of Continuously Welded Rail Structure Design and Construction*, American Passenger Transit Association, Rapid Transit Conference, Design, Atlanta GE, June 1985. Concrete Loading Ramp Rehabilitation - Crowley

**Transportation Services** Mr. Gathard acted as Project Manager for the condition survey and rehabilitation design of this two level 300 foot long concrete tractor trailer loading ramp structure. Proximity to saltwater environment and poor construction practices caused structural failure of this relatively newly constructed ramp. Conditions required that this facility operate continuously during repairs and new construction. The project involved providing an initial condition survey, analysis, recommendations and cost estimates. This was followed by a rehabilitation design including design of temporary traffic access ramp, traffic rerouting, moisture protection overlay, concrete repair, and construction phasing.

#### **Dock Construction - Covich & Williams**

This 258 feet long dock was constructed from hollow core prestressed precast concrete panels. The panels are structurally composite with a topping slab. A concrete apron at the beginning of the pier was integrated with an existing wood apron. Construction included fuel lines, fire protection and shore power.

*Dock Analysis - Crowley Marine Services* Project involved inspection of existing timber pile bulkhead and analysis for large crane loads. Initial phase involved a condition survey of dock. Analysis provided determined effects of 500,000 pound crane loads on dock and bulkhead.

#### Indefinite Quantity Contracts - U.S. Navy, EFA

*NW* Project Civil Engineering Manager responsible for providing civil engineering services for eight delivery orders at Subbase Bangor and supported commands under this IQ contract. These projects included a sanitary sewer study, civil design for a retention facility, KB Dock dredging at Bangor, and design of an oily bilge water separator facility at Keyport.

#### KB Dock Dredging - U.S. Navy, EFA NW

Mr. Gathard was project engineer responsible for developing a Puget Sound Dredged Disposal Analysis (PSDDA) sampling plan and implement the plan with the required sampling and testing. A hydro-survey of the areas was provided. The project also includes AutoCAD generated engineering drawings, specifications (SPECSINTACT) and cost estimating. *Indefinite Quantity Contracts - U.S. Navy, EFA NW* Project Civil Engineering Manager responsible for providing civil engineering services for eight delivery orders at Subbase Bangor and supported commands under this IQ contract. These projects included a sanitary sewer study, civil design for a retention facility, KB Dock dredging at Bangor, and design of an oily bilge water separator facility at Keyport.

#### Pier 17 Maintenance Project - Port of Seattle

Project engineer for study and design involving development of reconstruction alternatives to 500 feet of storm damaged bulkhead at Pier 17. The study provided design criteria, construction cost estimates for recommended repair option, and discussions of existing conditions and required shore protection. Follow-on engineering services included design and construction support.

#### Piers 90 and 91 Redevelopment - Port of Seattle

Project Manager responsible for the inspection and subsequent repair design for approximately 200,000 sf of timber apron at Pier 90. In addition, responsible for repair design of approximately 10,000 lineal feet of seawall for Piers 90 and 91. Project also included an inspection of the fire protection and waste water utilities for the piers, including repair design. Timber pile rehabilitation was required including pile replacement and pile wrapping. Pier substructure rehabilitation included member and deck replacement. Some pier areas were given large wheel load ratings by including cast-in-place concrete slab.

#### Terminals 25, 105, 115 - Port of Seattle

Project engineer for repair of 75 prestressed concrete piles. Design included alternative replacement and repair designs. Both designs allowed for continued use of aprons by tenant.



#### Levy to Move Seattle Oversight Committee

16 Members: Pursuant to Ordinance 124796, 10 members subject to City Council confirmation, 4-year terms:

- 5 City Council-appointed
- 5 Mayor-appointed

**Roster:** 

 # Other Appointing Authority-appointed (specify): 4 modal advisory board representatives appointed by respective modal advisory boards; City Council Transportation Committee Chair; City Budget Director

*D	**G	RD	Position No.	Position Title	Name	Term Begin Date	Term End Date	Term #	Appointed By
	F	3	1.	Member	Rachel Ben-Shmuel	1/1/20	12/31/23	2	Mayor
6	F	7	2.	Member	Hester Serebrin	1/1/16	12/31/22	2	Mayor
	М	6	3.	Co-Chair	Ron Posthuma	1/1/18	12/31/21	1	Mayor
6	М	4	4.	Member	Samuel Ferrara	1/1/19	12/31/22	1	Mayor
6	F	3	5.	Member	Lisa Bogardus	1/1/20	12/31/23	1	Mayor
6	М	6	6.	Member	Dennis Gathard	1/1/20	12/31/23	1	Council
	F	5	7.	Member	Vicky Clarke	1/1/19	12/31/22	1	Council
6	F	4	8.	Member	Inga Manskopf	1/1/20	12/31/23	1	Council
	М	1	9.	Member	Joe Laubach	1/1/19	12/31/22	2	Council
	М	2	10.	Member	Kevin Werner	1/1/18	12/31/21	1	Council
	М	2	11.	Bike Advisory Board Member	Patrick Taylor	9/1/20	8/31/22	1	SBAB
			12.	Pedestrian Advisory Board Member	David Seater	4/1/19	3/31/21	2	SPAB
	М		13.	Freight Advisory Board Member	Todd Biesold	6/1/18	5/31/19	1	SFAB
	F	2	14.	Transit Advisory Board Member	Jen Malley-Crawford	8/3/19	8/2/21	1	STAB
	М	6	15.	Councilmember	Alex Pedersen	n/a	n/a		
	М		16.	Budget Director	Ben Noble	n/a	n/a		

SELF-IDENTIFIED DIVERSITY CHART					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Male	Female	Transgender	NB/ O/ U	Asian	Black/ African American	Hispanic/ Latino	American Indian/ Alaska Native	Other	Caucasian/ Non- Hispanic	Pacific Islander	Middle Eastern	Multiracial
Mayor	2	3											
Council	3	2											
Other	5	1											
Total	10	6											

Key:

\*D List the corresponding *Diversity Chart* number (1 through 9)

\*\*G List gender, M= Male, F= Female, T= Transgender, NB= Non-Binary O= Other U= Unknown

**RD** Residential Council District number 1 through 7 or N/A

Diversity information is self-identified and is voluntary.



Legislation Text

File #: CB 119989, Version: 1

#### **CITY OF SEATTLE**

#### ORDINANCE

COUNCIL BILL

AN ORDINANCE relating to the Your Voice, Your Choice program; authorizing the Director of the Seattle Department of Transportation (SDOT) to acquire, accept, and record, on behalf of The City of Seattle, an easement for street purposes from Seattle School District No. 1, a municipal corporation of the State of Washington, situated in a portion of the Tract described as "Reserve" in the Plat of S.P. Dixon's Green Lake Acre Tracts; designating the easement for street purposes; placing the real property rights under the jurisdiction of SDOT; and ratifying and confirming certain prior acts.

WHEREAS, Hazel Wolf K-8 STEM School ("School"), together with neighbor residents, submitted an

application for The City of Seattle's Your Voice, Your Choice program ("Program") to upgrade the

intersection of Pinehurst Way Northeast and Northeast 117th Street ("Intersection") to enhance safety

and mobility while improving access to the School; and

WHEREAS, The City of Seattle ("City") studied traffic data at the Intersection which demonstrated that a

collision pattern existed that could be resolved through a redesign of the Intersection; and

WHEREAS, the City prioritizes resource allocation for high-collision locations to improve such conditions as

soon as possible and as a result, the application was subsequently accepted by the City to provide

funding from the Program to redesign the Intersection; and

WHEREAS, design improvements for the Intersection consist of new traffic signals, reconfiguration of the Intersection layout, installation of marked crosswalks and medians to provide safe and comfortable crossings, implementation of turning movement restrictions to reduce congestion and potential conflicts, construction of a new block of sidewalk on the south side of Northeast 117th Street between Roosevelt Way Northeast and 12th Avenue Northeast to improve walking routes to the School, and the creation of

#### File #: CB 119989, Version: 1

a new connection for the future Pinehurst Neighborhood Greenway and the future Northgate Link Light Rail Station ("Improvements"); and

WHEREAS, the Improvements will benefit all travel modes, improve traffic flow, reduce the number of collisions, improve mobility, and provide a safer and more convenient walking and biking experience through and along the Intersection and access to the School; NOW, THEREFORE,

#### **BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:**

Section 1. The Easement for Street Purposes, dated July 22, 2020, granted by Seattle School District No. 1, a municipal corporation of the State of Washington, recorded under King County Recording Number 20200722001504 ("Easement") and attached as Attachment 1 to this ordinance, granting to The City of Seattle an easement for street purposes, over, under, upon, and across property legally described and depicted in Exhibit A of Attachment 1 to this ordinance is accepted.

Section 2. The Easement is designated for street purposes and placed under the jurisdiction of the Seattle Department of Transportation.

Section 3. Funding for the Your Voice, Your Choice program, including the property acquisitions, comes from the Real Estate Excise Tax and street vacation fees.

Section 4. Any act consistent with the authority of this ordinance taken prior to its effective date is ratified and confirmed.

Section 5. This ordinance shall take effect and be in force 30 days after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the	day of	, 2021, and signed by
me in open session in authentication of its pa	ssage this day of	, 2021.

	Pres	ident	of the City (	Council
Approved / returned un	nsigned / vetoed thi	s day	of	, 2021.
	Jenr	ny A. Durkan, M	ayor	
Filed by me this	day of		, 2021.	
	Mor	nica Martinez Si	mmons, City Cler	 k

(Seal)

Attachments:

Attachment A - Recorded Easement for Street Purposes granted by Seattle School District No. 1

After recording return document to:

City of Seattle Department of Transportation 700 5<sup>th</sup> Avenue - Suite 3800 P.O. Box 34996 Seattle, WA 98124-4996 Attn: Michelle Talbot

Document Title: Easement for Street Purposes Reference Number of Related Document: N/A Grantor (s): Seattle School District No. 1 Grantee: City of Seattle Abbreviated Legal Description: Ptn of Dixons S P Green Lake Acre Trs Por Nwly of Pinehurst Way Plat Block: Plat Lot: Res. Vol 17, PP19, King County, Washington Additional Legal Description on Exhibit A Page 4 of Document. Assessor's Tax Parcel Number(s): 204450-0390

#### EASEMENT FOR STREET PURPOSES

Project: NE 117th St Intersection Redesign and Sidewalk

The Grantor, **SEATTLE SCHOOL DISTRICT NO. 1**, a municipal corporation of the State of Washington, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00), and other valuable consideration, hereby conveys and warrants to the **CITY OF SEATTLE**, a municipal corporation of the State of Washington, an Easement for street purposes over, under, upon and across the hereinafter described lands, situated in King County, State of Washington, to the same extent and purpose as if the rights herein granted had been acquired under Eminent Domain statutes of the State of Washington:

See Exhibit A attached hereto and made a part hereof.

Page 1 of 5 pages

SEATTLE SCHOOL DISTRICT NO. 1, a municipal corporation of the State of Washington

Kathy Johnson Property Manager

)

2020 Date

STATE OF WASHINGTON ) : §

County of King

On this 13th day of April, 2020, I certify that I know or have satisfactory evidence that KATHY JOHNSON is the person who appeared before me and said person acknowledged that she signed this instrument, on oath stated that she was authorized to execute this instrument as the Property Manager of SEATTLE SCHOOL DISTRICT NO. 1, a municipal corporation of the State of Washington, and acknowledged it to be the free and voluntary act of such party for the use and purpose mentioned in this instrument.

GIVEN under my hand and official seal the day and year last above written.



4 <sup>6</sup> vag
Canole Rusmonic -
Notary (print name) Carole Rusimoric
Notary Public in and for the State of Washington,
residing at Auburn, WA
My Appointment expires 319 2024

Page 2 of 5 pages

Approved and Accepted By: CITY OF SEATTLE

By: 🤇

Sam Zimbabwe, Director Seattle Department of Transportation

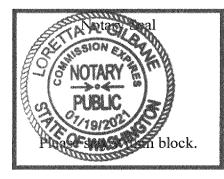
Dated: July 2.2., 2020

STATE OF WASHINGTON : § )

County of King

On this <u>22<sup>nd</sup></u> day of <u>July</u>, 2020, before me personally appeared SAM ZIMBABWE, to me known to be the Director of the Seattle Department of Transportation of the City of Seattle, a Washington Municipal Corporation, the municipal corporation that executed the within and foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said municipal corporation for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument.

GIVEN under my hand and official seal the day and year last above written. per la



Souttal Sulbare
Notary (print name) Lovetta A-Gilbane
Notary Public in and for the State of Washington,
residing at <u>Leattle WA</u>
My Appointment expires 01/19/2021

Page 3 of 5 pages

#### EXHIBIT A PERMANENT EASEMENT FROM PARCEL NO. 2044500390

An easement for sidewalk purposes across a portion of the below described PARCEL A, lying northerly, northeasterly and southeasterly of the following described line:

Beginning at the intersection of the centerlines for NE 117<sup>th</sup> Street and 15<sup>th</sup> Ave NE, being a found 2-inch brass disk set into a concrete monument in case; thence along the centerline of said NE 117<sup>th</sup> Street North 88°22'37" West, 160.06 feet; thence at right angles to said centerline South 01°37'23" West, 30.00 feet to a point on the northerly line of said PARCEL A, said northerly line also being the southerly margin of the aforementioned NE 117<sup>th</sup> Street, and the TRUE POINT OF BEGINNING of the hereinafter described line; thence leaving said southerly margin South 84°52'37" East, 13.78 feet; thence South 44°16'07" East, 6.29 feet; thence South 40°18'43" West, 33.28 feet; thence South 54°25'03" East, 1.07 feet to a point on the northwesterly margin of Pinehurst Way NE, and the terminus of said line description, containing 102 square feet, more or less.

#### PARCEL A

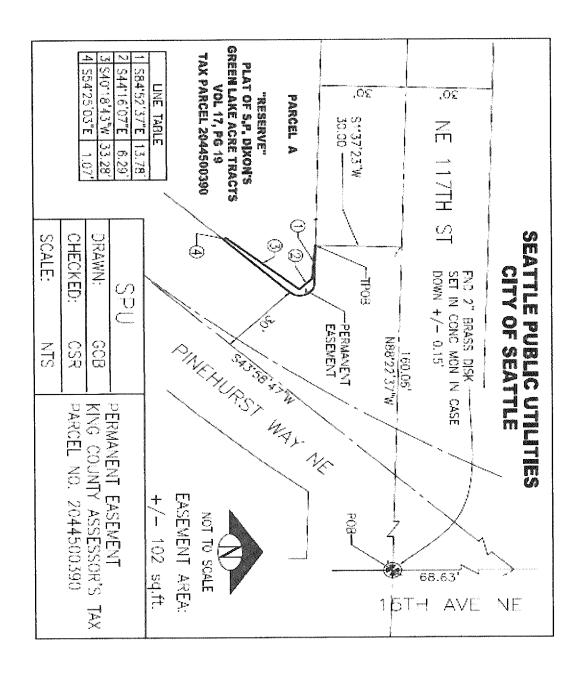
THAT PORTION OF THE TRACT DESCRIBED AS "RESERVE" IN THE PLAT OF S.P. DIXON'S GREEN LAKE ACRE TRACTS, ACCORDING TO THE PLAT RECORDED IN VOLUME 17 OF PLATS, PAGE 19, IN KING COUNTY, WASHINGTON;

EXCEPT THAT PORTION LYING SOUTHEASTERLY OF THE NORTHWESTERLY MARGIN OF PINEHURST WAY; AND

EXCEPT PORTION CONVEYED TO THE CITY OF SEATTLE BY DEED RECORDED UNDER RECORDING NUMBER 64122216.



Page 4 of 5 pages



Page 5 of 5 pages

#### SUMMARY and FISCAL NOTE\*

Department:	Dept. Contact/Phone:	CBO Contact/Phone:
Seattle Department of	Gretchen Haydel/206 233-5140	Christie Parker/206 684-5211
Transportation		

\* Note that the Summary and Fiscal Note describes the version of the bill or resolution as introduced; final legislation including amendments may not be fully described.

#### **1. BILL SUMMARY**

#### **Legislation Title:**

AN ORDINANCE relating to the Your Voice, Your Choice program; authorizing the Director of the Seattle Department of Transportation (SDOT) to acquire, accept, and record, on behalf of The City of Seattle, an easement for street purposes from Seattle School District No. 1, a municipal corporation of the State of Washington, situated in a portion of the Tract described as "Reserve" in the Plat of S.P. Dixon's Green Lake Acre Tracts; designating the easement for street purposes; placing the real property rights under the jurisdiction of SDOT; and ratifying and confirming certain prior acts.

#### Summary and background of the Legislation:

This legislation authorizes the acquisition, acceptance, and recording of an easement for street purposes to The City of Seattle ("City") granted by the Seattle School District No. 1, a municipal corporation of the State of Washington, in connection with the City's acceptance of an application for the Your Voice, Your Choice program, submitted by Hazel Wolf K-8 STEM School ("School") and neighborhood residents to reconfigure the intersection of Pinehurst Way Northeast and Northeast 117th Street to address safety concerns ("Intersection").

The Intersection contains two north-south arterials, Pinehurst Way Northeast and 15th Avenue Northeast crossed by an east-west non-arterial, Northeast 117th Street, creating a complex junction of three intersections. Northeast 117th Street is also a future Pinehurst Neighborhood Greenway route that will connect people walking and biking between the Olympic Hills, Pinehurst, and Maple Leaf neighborhoods, and the future Northgate Link Light Rail Station.

The primary goal of the project is to improve safety and mobility along the corridor so that all travelers may have a safer and more comfortable experience and to improve access to the School. The improvements at the Intersection consist of intersection reconfiguration, marked crosswalks and curb ramps, new full signals, new bicycle crossing, new sidewalks, and sidewalk repair and replacement.

Your Voice, Your Choice is an annual initiative in which Seattle residents democratically decide how to spend a portion of the City's budget on small scale park and street improvements. The program initiative is a partnership between the Department of Neighborhoods, the lead agency, and the Seattle Department of Transportation.

The Intersection improvements are funded through the Real Estate Excise Tax and street vacation fees.

#### 2. CAPITAL IMPROVEMENT PROGRAM

Does this legislation create, fund, or amend a CIP Project? \_\_\_\_ Yes  $\_\sqrt{}$  No

#### **3. SUMMARY OF FINANCIAL IMPLICATIONS**

Does this legislation amend the Adopted Budget? \_\_\_\_\_ Yes  $\____$  No

**Does the legislation have other financial impacts to The City of Seattle that are not reflected in the above, including direct or indirect, short-term or long-term costs?** Yes. The cost of the permanent easement is \$3,820.

#### Is there financial cost or other impacts of *not* implementing the legislation?

Yes. Not implementing the legislation would result in the need to redesign a portion of the project to provide adequate sidewalk width at the northeast corner of the School. A redesign of this project would negatively impact both pedestrian and bicycle safety and could prove to be more costly than the acquisition. Additionally, the proposed upgrades at the Intersection are responsive to safety concerns that need to be addressed by the City. Failure to do so could expose the City to liability costs.

#### **4. OTHER IMPLICATIONS**

- **a.** Does this legislation affect any departments besides the originating department? No.
- **b.** Is a public hearing required for this legislation? No.
- **c.** Does this legislation require landlords or sellers of real property to provide information regarding the property to a buyer or tenant? No.
- **d.** Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation? No.
- e. Does this legislation affect a piece of property? Yes, the Seattle School District No. 1 is granting an easement to the City to install improvements at the Intersection to benefit the community.

Gretchen M. Haydel SDOT Pinehurst Way NE and NE 117th St Easement Acceptance SUM D1a

- f. Please describe any perceived implication for the principles of the Race and Social Justice Initiative. Does this legislation impact vulnerable or historically disadvantaged communities? What is the Language Access plan for any communications to the public? There are no known impacts to vulnerable or historically disadvantaged communities.
- g. If this legislation includes a new initiative or a major programmatic expansion: What are the specific long-term and measurable goal(s) of the program? How will this legislation help achieve the program's desired goal(s)?
   This legislation does not include a new initiative or a major programmatic expansion.

**List attachments/exhibits below:** Summary Exhibit 1 - Vicinity Map Summary Exhibit 2 - Project Area

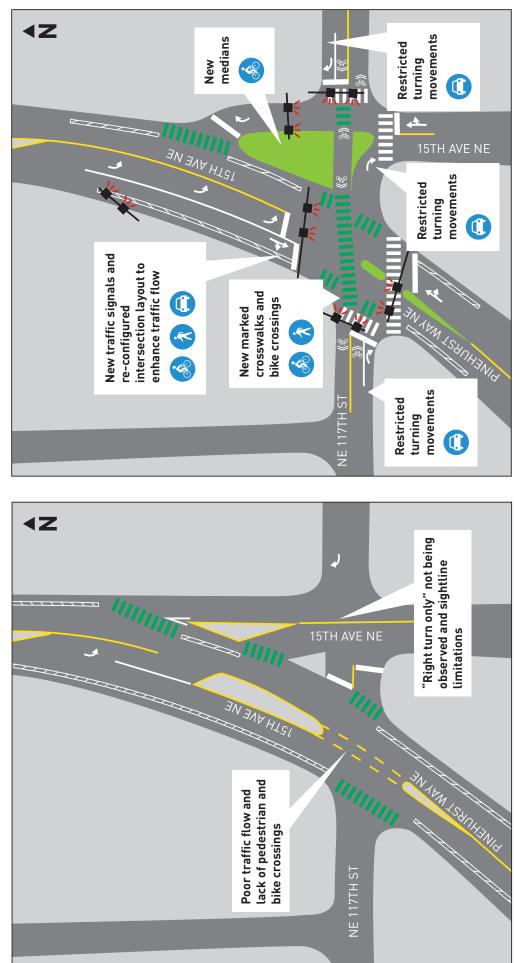
#### King County



**King County** 

**PROPOSED INTERSECTION DESIGN AND USER BENEFITS** 

# **EXISTING INTERSECTION AND CHALLENGES**



# PROJECT INFORMATION & CONTACT Your Voice, Your Choice Projects

www.seattle.gov/transportation/projects-and-programs/programs/pedestrian-program/ pinehurst-way-ne-and-ne-117th-st-intersection-and-sidewalk-project DOT\_NE117thPinehurst@seattle.gov | [206] 316-2549

# Pinehurst Way NE and NE 117<sup>th</sup> St Intersection Easement Acceptance

Council Transportation and Utilities Committee Joel Darnell 02/03/21 Department of Transportation



## Our vision, mission, and core values

Vision: Seattle is a thriving equitable community powered by dependable transportation

**Mission:** to deliver a transportation system that provides safe and affordable access to places and opportunities

### Committed to 6 core values:

- Equity
- Safety
- Mobility
- Sustainability
- Livability
- Excellence



## **Presentation overview**

- Background
- Project area and collision patterns
- Existing conditions
- Intersection design
- Project details
- Project benefits

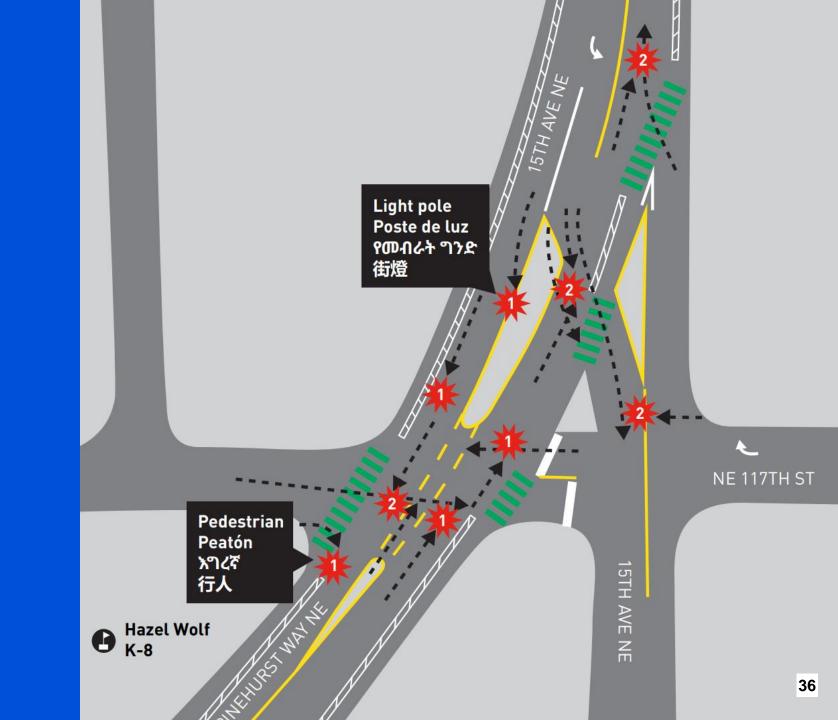


# Background

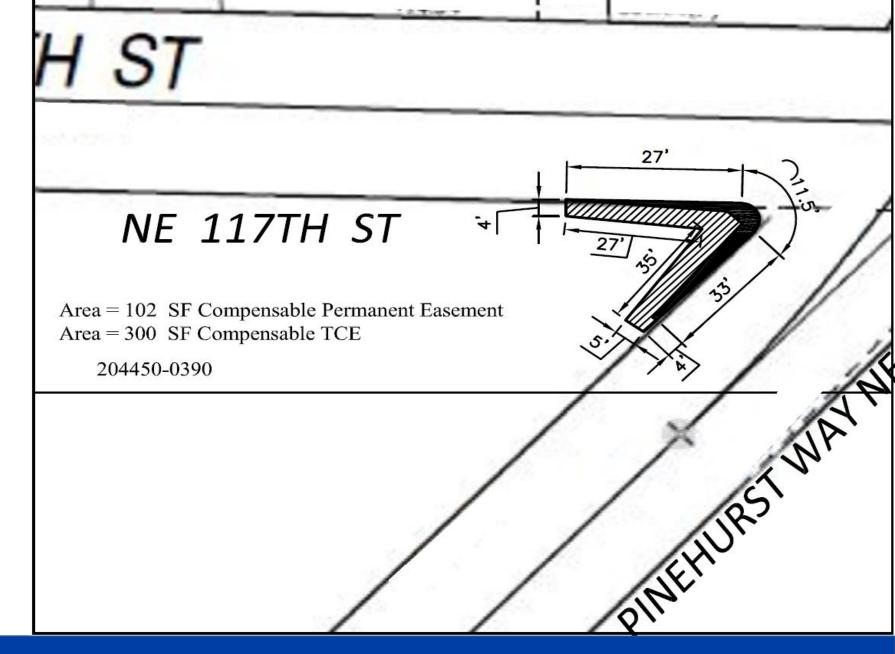
- Hazel Wolf K-8 Stem School and neighborhood residents applied and was chosen for the Your Voice, Your Choice program, to implement and expedite neighborhood project
- Project goal centered on upgrading the intersection of Pinehurst Way NE and NE 117<sup>th</sup> St to enhance safety and mobility and improve school access
- City conducted traffic study that uncovered collision pattern
- Intersection redesign was determined to be an appropriate resolution, along with adding new sidewalks connecting to the school
- Project has received federal grant funds through WSDOT



## Project Area and Collision Patterns



# Easement Area







# Existing conditions

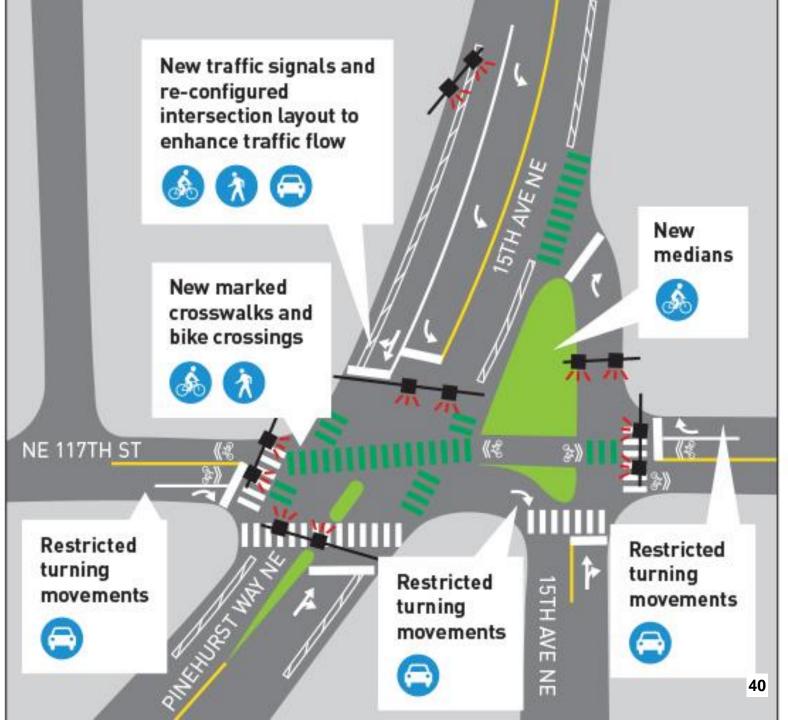


# **Intersection Redesign**

- Intersection reconfiguration
- New traffic signals, with dedicated crossing for bikes
- Installation of marked cross walks, bike crossings, and medians
- Restricted turning movements
- Sidewalk repairs and curb ramp improvements
- New sidewalk along the South side of NE 117<sup>th</sup> St between Roosevelt Ave NE and 12<sup>th</sup> Ave NE



# **Project Details**



# **Project Benefits**

- Improves walking and biking route to school
- Reduces future collisions
- Provides new connection to future sites of:
  - 1) Pinehurst Neighborhood Greenway
  - 2) Northgate Link Light Rail Station



# **Questions**?

Joel.Darnell@seattle.gov | (206) 684-5065 https://www.seattle.gov/transportation/projects-andprograms/programs/pedestrian-program/pinehurst-way-neand-ne-117th-st-intersection-and-sidewalk-project

www.seattle.gov/transportation







Legislation Text

#### File #: Res 31986, Version: 1

#### **CITY OF SEATTLE**

#### RESOLUTION

A RESOLUTION relating to the City Light Department; acknowledging and approving the 2020 Integrated Resource Plan Progress Report as conforming with the public policy objectives of The City of Seattle and the requirements of the State of Washington; and approving the Progress Report for the biennium September 2018 through August 2020.

WHEREAS, The City of Seattle ("City") recognizes the desire of its citizens to have adequate, reliable,

affordable, equitable, low-risk, and environmentally responsible electric power resources; and

WHEREAS, the City recognizes the need for clean and reliable electric power resources to assure the economic

well-being, health, comfort, and safety of its citizens; and

WHEREAS, the 2020 Integrated Resource Plan Progress Report continues to emphasize conservation first as

its foundation and is consistent with Seattle City Council Resolution 30144 for meeting as much load

growth as possible with conservation and renewable resources; and

WHEREAS, the 2020 Integrated Resource Plan Progress Report recognizes that the City Light Department

("City Light") has been a leader in reducing its greenhouse gas emissions and plans to maintain

greenhouse neutrality; and

WHEREAS, the 2020 Integrated Resource Plan Progress Report describes that City Light has a role to serve to further advance regional greenhouse gas reductions and support leadership in the region as a model for energy conservation, renewable energy, and electrification; and

WHEREAS, the 2020 Integrated Resource Plan Progress Report describes that City Light will in its next Integrated Resource Plan Update develop a ten-year Clean Energy Action plan describing the steps that City Light will take to maintain greenhouse gas neutrality and equitable access to clean and affordable

#### File #: Res 31986, Version: 1

energy, and make progress towards being greenhouse gas-free by 2045 to conform with the 2019 Washington Clean Energy Transformation Act (CETA); and

- WHEREAS, the 2020 Integrated Resource Plan Progress Report is intended to conform with State of Washington requirements under Revised Code of Washington (RCW) Chapter 19.280 for development of integrated resource plans or progress reports by consumer-owned utilities and approval of such plans or reports by the consumer-owned utilities' governing boards by September 1 each biennium; and
- WHEREAS, the City recognizes City Light's staff has requested and received permission from the Washington State Department of Commerce ("Commerce") to delay its completion of an updated Integrated Resource Plan (IRP) and instead complete an Integrated Resource Plan Progress Report; and
- WHERAS, the City recognizes in addition to this one-time deviation from normal practice, Commerce also granted permission to extend the transmittal to City Council to December 31, 2020; and
- WHERAS, the City recognizes the decision by City Light's staff to request this change was a result of City Light's need to effectively incorporate and communicate provisions of the recently passed CETA, and the COVID-19 pandemic; and
- WHEREAS, the City's Integrated Resource Plan will be revised and updated within the next two years to reflect changes to the region's and City Light's circumstances; NOW, THEREFORE,

# BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE MAYOR CONCURRING, THAT:

Section 1. The City Council acknowledges the 2020 Integrated Resource Plan Progress Report, as developed by the City Light Department ("City Light") and attached to this resolution as Attachment 1, and hereby approves the 2020 Integrated Resource Plan Progress Report for the biennium September 2018 through August 2020. The Progress Report complies with the public policy objectives of The City of Seattle and the requirements of the State of Washington.

Section 2. Consistent with the findings of the 2020 Integrated Resource Plan Progress Report, the City

#### File #: Res 31986, Version: 1

Council expects City Light to continue to emphasize environmental leadership and compliance with the Washington Energy Independence Act and the Washington Clean Energy Transformation Act through its conservation programs, between now and the completion of the 2022 Integrated Resource Plan.

	Adopted by the City Council the	day of		_, 2021S, and signed
by me	in open session in authentication of	its adoption this	_day of	,
2021.				
		President	of the City Counc	
	The Mayor concurred the	_day of	, 2021	
		Jenny A. Durkan, Mayo		
	Filed by me this day of _		, 2021.	
		Monica Martinez Simn	nons, City Clerk	_

(Seal)

#### File #: Res 31986, Version: 1

Attachments:

Attachment 1 - Seattle City Light 2020 Integrated Resource Plan Progress Report



Seattle City Light



# **Overview**

Clean energy policies are driving changes in regional supply and demand and the biggest influences on this 2020 Integrated Resource Plan Progress Report are continued growth in renewable resources as well as energy efficiency, which are fast becoming centric to our energy future. As the costs of utility-scale solar and wind energy become less expensive, existing fossil fuels are being replaced with cleaner energy fuels.

#### This is a game changer.

Although recovery of a post-pandemic economy is still to be determined, technology innovations never took a break, and they are moving quickly — unleashing new opportunities for customer choice and participation in designing the future of our industry. Those choices, however, coupled with the rapid evolution in thinking about electrification, requires a similar focus on environmental equity and rate designs that don't leave vulnerable populations behind. In January 2020, Seattle Mayor Jenny Durkan signed an executive order committing the City to expedite Climate Action plans and reiterating the Seattle City Council's August 2019 resolution supporting a Green New Deal for Seattle. City Light's work ahead will focus on eliminating fossil fuels in the service area and improving outcomes for communities that have disproportionately shouldered the weight of environmental injustice. As Seattle City Light continues to invest in energy efficiency, renewable resources, and grid modernization, it will partner with customers to track loads, demand response opportunities, and distributed energy resources to shift and better spread loads throughout the day. (Demand response is a change in the power consumption of an electric utility customer to better match the demand for power with the supply). Internet technology and advanced metering enable customers to have smarter homes and businesses, with more flexibility to control loads and help the grid adapt to the continued changes over the next few decades. These utility and customer relationship changes must be done without backing off the strong commitment made this past summer to address and reverse the effect of decades of racial and social inequities disproportionately borne by our environmental justice communities, which includes Black, Indigenous, and people of color as well as immigrants, refugees, persons experiencing low incomes, English language learners, youth, and seniors.





City Light is creating a smart and instructive dashboard in its Integrated Resource Plan (IRP) framework with more targeted information to enable consumers to lower overall emissions, reduce environmental impacts, and increase fairness and equity while maintaining affordability. The goal is to create more overall value in personal and city energy use and energy efficiency.

City Light has been a consistent voice for generating electricity with clean renewable resources, promoting energy efficiency with our customers, and reducing the need to build or acquire costly new power generation. Since 2005, City Light has been greenhouse gas neutral — the first electric utility in the nation to achieve that distinction. Seattle's new homes are among the most energy efficient in the country. Our long-term emphasis on greenhouse gas neutrality has resulted in City Light being as high as 98% carbon free.

The steps to keep City Light as a forerunner in cleaner energy have many components. Determining the kinds of fuels (hydro, wind, solar, etc.) City Light will use to meet its customers' demands is an ongoing challenge. The path to owning, producing, and purchasing energy is filled with federal, state, and local regulations, some still in the making.

The job of the IRP is a complex one: determining what resources should support our energy use. There are myriad factors that go into completing an IRP and recommending changes to the resource portfolio. Many of them are brand new and more detailed than ever before: a groundbreaking new Clean Energy Transformation Act with an ongoing rule-making process, and new priorities for transportation electrification and decarbonization. There are newly released and evolving studies about changing weather patterns and their effects on water flows, upon which hydropower operations as well as fish and wildlife depend. Each day brings continuous improvements in wind, solar, thermal, and pumped storage. Batteries that are beyond what was imagined just last year are on the market. Plus, there is increasing regional cooperation in managing power resources, so the region can better share in overall energy efficiency. However, constant market shifts and this unusually fast-breaking recession are bringing new economic realities and making for uncertain timelines. All these factors have come together in the midst of a nine-month pandemic, the impacts of which are still uncertain.

City Light determined that producing a comprehensive resource study for a long-range IRP now would be inconclusive. Therefore, we sought and received permission from the Washington Department of Commerce to change course; recognizing the limited validity of completing and presenting a full IRP now, which would have limited durability and use in the future. Instead, we turned our attention to building a solid analytic foundation for the 2022 IRP, ensuring future resource adequacy with better evaluation of resource choices.



# **IRP Legal Requirements**

Washington law (RCW 19.280) requires all electric utilities with over 25,000 customers to develop comprehensive resource plans that identify strategies to meet their customers' electricity needs in the short and long term. Seattle City Light is required to file an Integrated Resource Plan, which is either a Progress Report due every two years or an updated Integrated Resource Plan due every four years. Progress Reports reflect changing conditions and the progress of Integrated Resource Plans, whereas Integrated Resource Plans are comprehensive resource plans that explain the mix of generation and demand-side resources the utility plans to use to meet their customers' electricity needs over the period covered in the plan. Our change in course means that City Light last produced a full Integrated Resource Plan in 2016. We prepared an Integrated Resource Plan Progress Report in 2018. With this exception due to emergent factors in 2020, City Light will next produce a comprehensive Integrated Resource Plan in 2022.

# 2020 Progress Report: The New Energy Frontier

City Light has entered a New Energy Frontier, where even a pandemic could not stop the many concurrent changes that are affecting how we all will adapt to the changing reliance on renewable energy. Fleets throughout our metropolitan region are rapidly electrifying, residential customers will be asked to use advanced metering systems to strategically plan their energy usage throughout the day, and we are focusing more on providing energy efficiency programs and benefits to disadvantaged communities. The main priority for our resource planning this past year has been to find a new and better framework for determining which resources are best for City Light's customer-owners. We are committed to making these choices in a more customer-centric manner.

The primary catalyst for the change in course is Washington's Clean Energy Transformation Act (CETA), passed by the legislature in 2019. It is the most significant mandate to-date addressing how we will reduce greenhouse gas emissions while transitioning to renewable energy resources. New regulations enforcing its provisions are being written and are expected to go into effect in 2021. The new rules will change decades of reliance on fossil fuels, replacing them with renewable resources and distributed energy resources. The benefits of energy efficiency allow City Light to offer programs that save energy so that new, more costly resource acquisitions and generation are not necessary. In addition, new tools like demand response and battery storage will fill voids where hydropower and new renewable energy sources cannot.

Today's Progress Report also introduces a new framework incorporating resource adequacy. With the increasing renewable resource markets growing more competitive, City Light can rely on short-term market purchases to fill customer demand, with an overall energy supply that is greenhouse gas neutral and as high as 98% greenhouse gas free – for at least the next five years.

### **New Framework**

As City Light began our 2020 integrated resource planning efforts, we quickly saw efforts across the region and the energy economy that would reduce greenhouse gas emissions faster than outlined in the 2018 IRP Progress Report. We determined that new resource choices, investments in energy efficiency, renewable generation and demand response would emerge as important resource choices for the future. We made a commitment to stakeholders to expand our evaluation of energy efficiency resources to include the added value and benefits of each option. Additionally, as the new requirements of the CETA were being written, City Light focused on testing reliability



metrics used in the electric utility industry to find a metric wellmatched to a flexible hydropower utility like City Light.

The new framework we developed will better answer the question of how much of each energy resource we need to meet demands each year. Previously, potential energy shortages were tracked only in the winter months when peak seasonal loads required large amounts of energy. The new framework provides evidence that summer months need to be tracked, as water supply resources may be stressed if water levels drop. The utility may need to maintain higher-level water for fish runs, recreational needs, and unseasonably long periods of high temperatures, meaning we must find other means to meet demand.

### New Directions to Cleaner Seattle Power Mixes

The 2020 IRP Progress Report shows City Light's power supply is built on a robust hydropower portfolio that will meet our power supply needs for several years to come. City Light's existing shortand long-term plans include new investments in energy conservation while continuing to evaluate investments in new renewable energy.

But resource adequacy priorities are changing. Summer emerges as the primary season to watch for the possibility of needing new resource adequacy investments. A proposed new Northwest Power Pool Resource Adequacy Program has the promise of helping the region create a more transparent, dependable, affordable, and clean generating mix. We identified another new tracking need: gauging how City Light's hydropower resources would respond to adding variable renewable energy resources to the mix across all hours. We also developed more metrics to help determine if advising customers to change their own energy patterns can save energy and costs. Most customers now have advanced meters, which will allow them to track their energy use.

With solar and wind growing as a significant share of the power supply, Seattle must start planning for greater uncertainty in wholesale market supply conditions throughout the year, due to the variability in production of hydro, solar, and wind. New studies also will help produce more in-depth water resource and operations information, identifying the hours when City Light might change hydropower operations to better meet local and regional goals of reducing greenhouse gas emissions.

Perhaps the largest addition to this 2020 Progress Report is a new scientific standard on how City Light gauges hydro resource adequacy so that we can better prepare for when hydro runs low, as in the late summer. Both wind and solar energy supplies are more available in the summer months. The research and testing of our metrics referred to as the "new framework" have spurred changes in when, how much, and how often we chart hydro supply and energy needs. Ongoing energy complexity meets new technology to deliver both a pathway to conserving more water when it runs low in late summer and meeting new energy need with contracts for solar and wind, which are more abundant in summer.



As City Light forges ahead in creating our 2022 IRP, we will align information from our 2022 Conservation Potential Assessment, new Transportation Electrification Strategic Investment Plan, and other electrification work to inform Seattle's future power mix.

# Premises for the 2022 Integrated Resource Plan

#### Conservation investments continue to outpace growth in

**customers' use of power.** Conservation investment remains the first and best resource choice as the most environmentally responsible way to meet growing energy demands, resource adequacy, and 100% carbon-free regulations. It also provides a low-cost way to meet the Washington Energy Independence Act requirements.

**City Light expects to add new clean fuels (wind and sun) to our power mix, starting with customer programs.** New alternative renewable energy investments through customer-centric programs and utility choices reduce City Light's market reliance and help City Light customers achieve their goals to reduce their carbon footprint.

**Cost should not be the only consideration when picking an alternative energy resource.** The IRP framework shows comparing resources on cost alone will not lead to the most value. A higher-cost energy efficiency resource path that provides reductions in power use at the right time must be considered for all its merits. The IRP analysis shows that increasing spending on energy efficiency could provide additional value by reducing City Light's Bonneville Power Administration (BPA) purchases now.

New power supply costs are declining, but caution should be taken, as adding too much new renewable power generation too soon could add costs to customer bills. Most new utility-scale clean power supply, customer solar generation, energy efficiency, and demand reduction options continue to decrease in price. Use of these products has increased due to tax incentives, rigorous energy efficiency codes and standards, net metering policy, and renewable portfolio standards. This has created a viable market for these new technologies and has led to faster installation. However, what works today may not endure through the life of the project, which is usually about 30 years due to the speed of technology change. Lower-cost customer demand response options and energy storage options such as batteries could be on the horizon. Future IRPs are likely to see expanded use of these technologies because they can provide important targeted reductions in power use.

# Transmission and distribution investments will be needed to support 100% greenhouse gas-free power and electrification.

Regional and local cooperation will be important to deliver increasing amounts of renewable power supplies. City Light's analysis projects possible limitations in delivering that power without changes in transmission policy or new investments. Going forward, regional and local discussions about alternatives to new electric power lines, which power lines are necessary to build, and how to pay for investments will be as important as evaluating power supply options.

Past IRPs concluded BPA preference power meets City Light

**goals** — **that has not changed.** Going forward, the Progress Report continues to rely on the BPA contract beyond 2028 to keep City Light's power supply dependable. BPA provides over 40% of City Light's power supply, and a future contract is expected to provide clean energy to meet demand during the winter and provide supplemental summer power when we have the highest energy needs. The analysis also shows that City Light is steadily reducing our BPA purchases and saving money now because of our investments in conservation. Our future use of BPA will be influenced by our load growth, BPA's available power supply and viability of reliable alternatives. City Light expects to engage BPA during the lead up to the new regional cooperation contract to ensure availability of products and contract structure that support the emerging needs of our utility, and the region as a whole.

#### Work continues to mitigate the impacts of climate change.

Through policies supporting energy conservation, renewable energy, and greenhouse gas neutrality as well as rigorous building codes,





the City of Seattle and City Light have been leaders. City Light is well-prepared to address the new greenhouse gas neutral and greenhouse gas free mandates of the CETA. The 2020 IRP analysis finds City Light today is close to a 100% greenhouse gas-free standard with 91% to 99% carbon-free energy. Additional renewable energy and City Light's newly adopted Transportation Electrification Strategic Investment Plan will further support carbon neutrality and advance City Light's ability to meet Seattle's Green New Deal objectives. **Customer-centric energy efficiency programs have been the go-to resource for the last decade, keeping electricity demand stable even with the region's economic growth.** The New Energy Frontier and innovative technology are opening new opportunities for customers to help reduce the need for utility-scale investment and keep costs down. The utility's challenge is to teach our customers about their own energy consumption and how to help us reduce greenhouse gas emissions. We look forward to the day when customers know this information just like they know the cost of a latte or a tank of gas.

# **Key Definitions**

**Resource Adequacy** refers to having sufficient resources, generation, energy efficiency, storage, and demand-side resources to serve loads across a wide range of conditions.

**Resource Needs** translate local, state, and federal regulations into defined minimum or maximum thresholds for having a certain type and amount of resources to meet demand or a portion of demand.

**Resource Choices** refers to the kinds of programs and fuels chosen to meet demand, like energy efficiency (conservation), alternative energy like wind and solar, renewable energy, fossil fuels, storage and battery capacity, hydro and others.

**Demand Response** is a change in the power consumption of an electric utility customer to better match the demand for power with the supply.



# **Planning A Cleaner Energy Future**

As part of the IRP process, City Light identifies supply needs for the next 20 years based on the ability of existing supply to meet future forecast demand, regulatory requirements, and uncertainty in supply and demand. Resource choices must correspond to City Light's goals of reliability, affordability, and environmentally responsible service. We must forecast and define our resource adequacy — having sufficient resources to serve loads across a wide range of conditions — and clean energy needs.

The selection of future portfolios meets requirements such as City Light's current standards for greenhouse gas neutrality, Initiative 937 mandates (Washington State Energy Independence Act) and the Washington State Clean Energy Transformation Act (SB5116) requirements. The following table highlights the legislative goals of these major policies enacted to combat climate change. In all cases there are alternative compliance mechanisms to prevent intolerable cost increases. These mechanisms include provisions for no load growth and capping costs at a percentage of all capital and operating expenditures we must make to provide service to our customers (revenue requirement).

"Resource choices must correspond to City Light's goals of reliability, affordability and environmentally responsible service."





	<ul> <li>All cost-effective and feasible conservation</li> <li>2026 — No coal</li> <li>2030 — 100% greenhouse gas neutral; at least 80% renewable and non-emitting resources</li> <li>2045 — 100% greenhouse gas free with renewable and non-emitting resources</li> </ul>
Energy Independence Act "I-	937″ (2006)
Energy Independence Act "I-	• All cost-effective conservation
Energy Independence Act "I-	
Energy Independence Act "I-9 Seattle City Light Carbon Neu	<ul> <li>All cost-effective conservation</li> <li>2020 — 15% renewable generation (excludes hydro)</li> </ul>

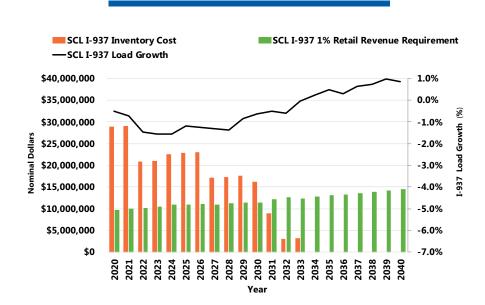
• Load growth met with cost-effective conservation and new renewable energy



# I-937 Energy Independence Act 2006

In 2006, Washington voters approved Initiative 937 (I-937), which requires major utilities to invest in all cost-effective energy efficiency measures and sets targets for adding Northwest renewable energy as a percentage of load. Eligible renewable resources include water, wind, solar energy, geothermal energy, landfill gas, wave, ocean or tidal power, gas for sewage treatment plants, bio-diesel fuel, and biomass energy. In 2020, the target increased to 15% of load. This target does not increase beyond the current level.

The law also includes provisions to keep costs affordable for utilities. Today, City Light can comply under the "no load growth" option. This option is available when a utility's weather-adjusted load average did not increase over the previous three years. In choosing this compliance option, City Light is required to demonstrate that we invested at least one percent of our total annual retail revenue requirement that year on eligible renewable resources.



City Light's Progress Report finds that our continued investment in the current conservation path from the 2020 Conservation Potential Assessment delays load growth until 2033. With our current inventory of eligible renewable resources, we do not project adding renewable resources for I-937 compliance until 2031. In the chart below, the black line represents the measurement of load growth. In 2030, the black line shows that City Light will be measuring half a percentage of load decline. The 2030 orange bar shows that City Light's eligible renewable resource expenditures are over \$15 million. The 2030 green bar shows the one percent of revenue requirement threshold is just over \$10 million dollars. This indicates City Light's one-year cost for renewable resources is about 1.5%, exceeding the 1% threshold for costs.

## **Clean Energy Transformation Act 2019**

The Clean Energy Transformation Act (CETA) provides electric utilities in Washington a clear mandate to phase out greenhouse gas emissions. CETA requires utilities eliminate the use of coal-fired resources after Dec. 31, 2025. Additionally, all electricity sold to customers must be greenhouse gas neutral starting Jan. 1, 2030, and greenhouse gas free by 2045. To be greenhouse gas neutral, a utility must supply at least 80% of its load with a combination of renewable and non-emitting resources. Utilities may use alternative compliance options during the greenhouse gas neutral period for no more than 20% of load.

CETA establishes that a utility must incorporate a social cost of greenhouse gases in making resource decisions. CETA sets a minimum cost that a utility must use from a technical study published in August 2016 by the Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. A utility is allowed to use a higher cost if it can establish a reasonable basis for doing so. City Light will use the social cost of greenhouse gases when evaluating conservation programs, developing IRPs, and evaluating mid- to long-term resource options during resource acquisition. The social cost of greenhouse gases represents the monetized damages associated with an incremental increase in carbon emissions in a given year. This cost is expected to increase over time as future emissions are expected to produce larger, incremental damages in response to climate change. The table below shows the costs being used.

Year	Social Cost of Greenhouse Gases (in 2019 dollars per metric ton of carbon dioxide)	For CETA, emissions fall into two categories known sources and			
2020	\$75	unknown sources.			
2025	\$83	City Light's sources			
2030	\$89	of emissions are			
2035	\$95	unknown; they come			
2040	\$102	from wholesale market			
2045	\$108	transactions where the			
2050	\$115	delivered power source is not always identified.			

In our IRP analysis, City Light has implemented CETA rules by adding the social cost of greenhouse gases as a penalty to market purchases in months that City Light has a deficit. Additionally, City Light assumes that 3% of its BPA power deliveries are from unspecified market purchases, which is consistent with a recent historical average.

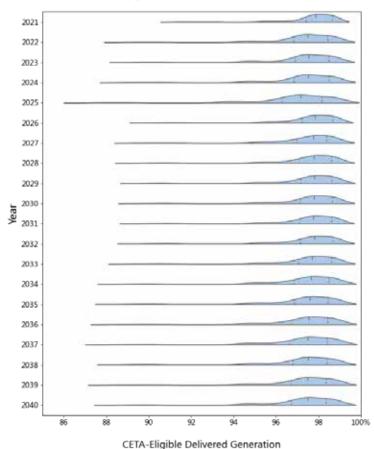
To calculate the penalty, City Light uses the CETA default emission rate for unspecified electricity, which is 0.437 metric tons of carbon dioxide equivalent per megawatt hour. City Light assumes this rate is constant through all future years studied.

City Light conducted a review of our existing supply portfolio and current 2020 Conservation Potential Assessment plans. Even without new resources, we find City Light can achieve 91% to 99% greenhouse gas neutrality across the anticipated range of hydro and temperature conditions we expect to experience.

The next chart shows the projected distribution of our greenhouse gas-free generation as a percentage of customer load. To better understand the chart, focus in on 2025, which has the largest tails. On the right tail of the distribution, the chart shows that under some conditions, City Light can be close to 100% greenhouse gas free. On the left tail, the chart shows that there is a condition, although unlikely, of coming in at 86% greenhouse gas free. The height of the blue shaded area indicates the frequency of the distribution. In 2025, under most conditions, City Light expects to be between 96% to 98% greenhouse gas free.

#### Estimated Distribution of CETA Greenhouse – Gas – Free Generation

No New Supply Resources and Current Conservation Path





### **Our Existing Resources**

The cornerstone of City Light's energy is hydropower: a clean, renewable resource that has always been the region's most reliable, affordable, and climate-friendly power source. City Light prioritizes environmentally responsible hydropower operations. Our power mix starts with our Skagit and Boundary hydropower projects on the Skagit and Pend Oreille Rivers, which in 2019 provided 40% of the power customers use today. The remainder comes from long-term contracts with the BPA and from other renewable sources. Purchases from the wholesale market fill the gaps when City Light's and BPA's water levels are low.

Since 2005, City Light has been greenhouse gas neutral, demonstrating commitment to mitigation of carbon emissions. If short-term energy needs require purchase from the wholesale markets, there may be fossil fuel resources like natural gas or coal in the purchase. To be true to our commitment, City Light purchases emission offsets, which are reductions in emissions in one place that can be used to compensate for emissions elsewhere. Offsets are usually denominated in metric tons of reduced emissions or megawatt hours of renewable energy.

\*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.

# **Determining Load**

Energy efficiency programs encourage customers to use power more efficiently and allow the utility to defer the acquisition of expensive new resources, including those that negatively affect the environment. Integral to developing the IRP, energy efficiency programs will help City Light maintain our status as a greenhouse gas neutral utility, support the City's environmental and climate change policy goals, and meet the requirements of I-937.

For example, the average City Light residential customer today uses less than 8,000 kilowatt hours of electricity per year, compared to over 10,000 kilowatt hours per year in 2000.

The 2019 retail load forecast (most recent available for the IRP) is expected to decline from 1,026 aMW (average megawatts) in 2020 to 999 aMW in 2040, or by about 0.1% per year over the next 20 years, after accounting for the impacts of energy efficiency programs and a softening Seattle economy with slower growth in future commercial square footage. There is, however, slight growth after the first 10 years, as energy efficiency tapers off and transportation electrification ramps up. City Light worked with King County Metro and the Washington State Ferries to reflect their electrification plans in this forecast.

#### City Light is completing a new load forecast that will be part of the 2022 IRP. We have the difficult task of identifying how load will change and for how long as a result of the pandemicinduced recession. City Light's annual 2020 retail load is expected to end the year 4% lower than forecasted in 2019.

Load and energy efficiency programs impact City Light's BPA power contract deliveries. As load declines, City Light receives less BPA power. The ability to add energy efficiency creates a choice for City Light that gives us some control over how much BPA power we receive. It is a complex but important relationship. As electrification grows, City Light's customers will use more of our existing surplus energy. Demand side choices of energy efficiency (and potential demand response) will allow City Light to get the highest and best use of our energy supply and the wholesale market.

# **Resource Adequacy**

Resource Adequacy (RA) refers to having sufficient resources, generation, energy efficiency, storage, and demand-side resources to serve loads across a wide range of conditions. City Light reviews a wide range of water and demand conditions to determine whether it has sufficient resources. In our 2018 IRP, City Light conducted an RA Assessment using an established winter-focused metric, and determined we had no need for new supply resource additions to meet resource adequacy for 20 years.

In gearing up for the New Energy Frontier, City Light is transforming our future to accommodate increases in solar and wind energy. We have updated our RA research to track all hours of the year for stressed circumstances that might prompt resource additions.

City Light's new RA study adopted a "Loss of Load Event" (LOLEV) resource adequacy metric, which measures the frequency of deficit events. City Light selected this metric because it better evaluates energy limitations that City Light could experience and identifies the value of resources such as battery storage and demand response.

City Light defines the duration and magnitude of a deficit event as greater than four hours and more than 200 megawatts (MW) per hour once a day, respectively. This means that deficit events of less than four hours and 200 MW per hour, or up to 800 megawatt hours once a day, can be easily covered by City Light's hydropower flexibility and are not considered an event. City Light also established a LOLEV standard of RA that means events cannot occur more than two times every 10 years for the months January, July, August, and December in order to stay within our portfolio resource adequacy. This standard yields the same RA needs as the previous winter metric but introduces summer RA needs. City Light's research and analysis identified these four critical months for setting RA targets based on



the concurrence of risks for City Light and the region that should be monitored into the future.

For its regional assessment, City Light relies upon the Northwest Power and Conservation Council (NW Council). NW Council's most recent study (October 2019) and our own analysis show concurrent regional and City Light RA risks occur in December, January, and August. The most likely changes to risk are for calendar year 2024 or later. The regional analysis also describes capacity shortfalls or shorter duration events whereas City Light's risks occur when the region still has available energy surplus. City Light's hydropower flexibility and capacity surpluses can leverage regional energy surpluses to fill voids. Additionally, anticipated new regional energy resources can reduce energy shortage risks when fossil fuel plants close. City Light decided to add July and August for its study because of the variability of water levels we can experience during July and the dry and restricted operating conditions we have in August. Additionally, climate change can exacerbate the severity of low water conditions in the summer; this will be well-monitored along with all months.

City Light also reviewed to what extent wholesale market reliance could be used as a backup in these critical months. City Light's analysis studied multiple years and determined that for the longterm, market reliance of about 200 MW is appropriate for short-term market purchases. However, we concluded that any projected energy shortages can be covered by City Light's hydro flexibility and our mid-term and short-term purchases following our wholesale hedging practices before 2026. City Light will continue to monitor regional markets for energy shortfalls that could lead City Light to change its LOLEV standards or market reliance levels.

City Light translates this RA information into a target amount of energy we need each month to meet the energy standard. With these guidelines and our new models, the utility stays ahead of its worst case scenarios by tracking where and when there may be shortages, so we are prepared for stressful conditions.

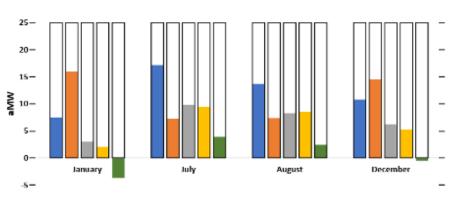
The following table shows the targets City Light's analysis established for near-term and long-term RA, assuming our existing conservation path from the 2020 Conservation Potential Assessment. In 2021, City Light will update this study with a new demand forecast and evaluate its market reliance in preparation for the next Conservation Potential Assessment. City Light will also continue to monitor regional market conditions.

Resource Adequacy Energy Need (Average Megawatts)	2022	2024	2026	2030	2034	2038	2040
December	27	38	13	20	5	3	10
January	-	-	-	-	-	-	-
July	156	134	137	146	159	165	177
August	39	25	113	122	147	146	161

## **Resource Choices**

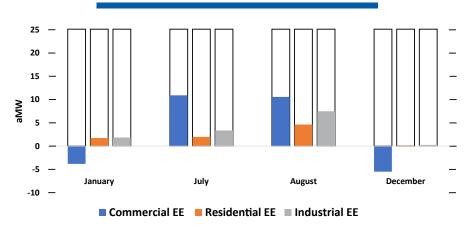
City Light's new approach matches new resource choices to both the region's and our own RA deficits across the different months. The analysis targets resource choices that complement City Light's existing resource mix and changing demand. It better informs about the capability of City Light's hydro fleet to respond to variability in generation from wind and solar resources, and to changes in demand from weather. Monthly RA targets allow City Light to select resources based on their contributions to the most critical time periods.

These next two charts show how each type of resource contributes relative to a measure of the maximum amount of output the resource can produce. As an example, the first blue bar shows that for Gorge Wind, the reliable contribution to RA is about 8 aMW of energy for every 25 MW of capacity. The green bar for "Behind the Meter Solar" produces what may be viewed as an unexpected result. It shows negative impacts in January and December because solar resources installed by customers (i.e., "behind the meter") have the same impact as energy efficiency by reducing City Light's load. Load reductions decrease the amount of BPA power that City Light receives. In the winter, the reduction in BPA is greater than the decrease in load.



Gorge Wind Montana Wind SE Oregon Solar E Washington Solar BTM Seattle Solar

The next chart shows how City Light's conservation programs contribute to RA. The blue bar, representing commercial energy efficiency, shows that it adds 10 aMW for every 25 aMW increase in energy efficiency in July.



Resources also gain additional benefits for being able to supply energy in periods when wholesale market prices are higher and helping City Light shape our hydro to market conditions. This year with new RA modeling and the addition of summer months changing resource needs, the IRP moves into a phase of evaluating whether our past resource choices will continue to prevail or if new options are in order.

For the 2020 IRP, City Light opted to focus on resource choices that were examined in the 2018 IRP to test the new framework. Some differences included the additions of behind-the-meter commercial solar, expanded review of energy efficiency, and the omission of natural gas-fueled power plants.





#### The resource choices studied are:

- ➤ 360 different energy efficiency combinations
- ➤ 360 different BPA purchase levels to correspond with the desired energy efficiency path
- ➤ Southeastern OR Solar
- ≻ Eastern WA Solar
- ≻ Gorge Wind
- ≻ Montana Wind
- > Commercial Customer Behind the Meter Solar
- ➤ Wholesale Market Reliance

**No fossil fuel resources, such as natural gas simple-cycle plants, "peakers," or combined cycle plants, were considered.** We acknowledge that market reliance is a source of greenhouse gases for City Light. This CETA-required assessment compares the value of renewable resources to market reliance and its impact to the environment.

Other resource choices that may increase reliability and lower cost are demand response (customers respond to a request by the utility to reduce their demand), and customer-owned and utility-scale storage resources (e.g., batteries, pumped storage hydro, and compressed air storage).

As the scale of wind and solar energy generation surpasses fossil generation, hydro flexibility may not be sufficient to take care of all deficit hours, and new storage may be the best current option to fill in that gap. City Light's 2022 IRP will focus on these technologies to add more resource adequacy at lower cost. Other renewable energy technologies that may play a role are geothermal, landfill gas, and biomass energy, if higher-cost resources are needed.

# **Resource Choices through the New Framework**

➤ The new framework shows increased and more targeted energy efficiency could be beneficial.

> Solar is becoming an appealing resource for City Light but has potential drawbacks like lack of resource diversity due to the significant solar growth that is happening across the West.

> Gorge Wind is like solar because it provides more energy in the summer. With a different generation pattern than solar, it is anticipated to have even more value as solar power becomes saturated in the West.

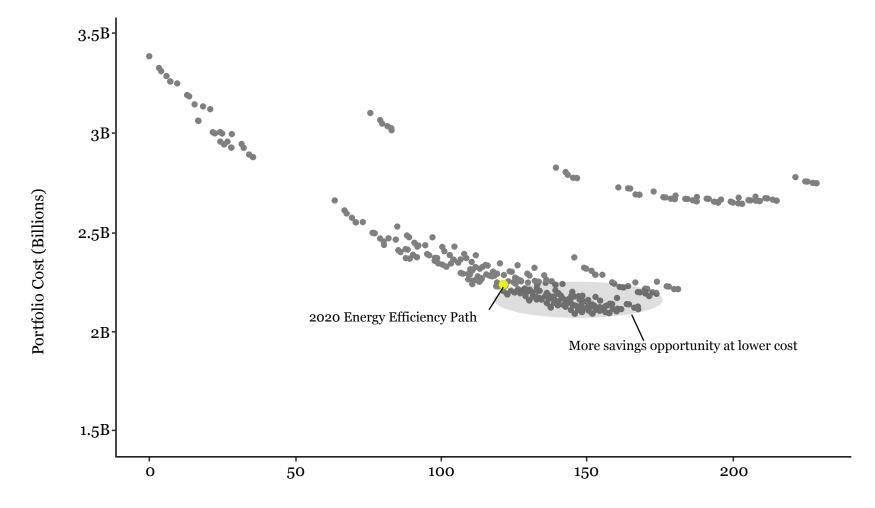
➤ Montana Wind is more expensive than Gorge Wind and solar. It appears to be one of the most promising wind supply resources if resource needs increase in the winter from a large growth in electric vehicles and heating loads. However, delivering Montana Wind may prove challenging without regional investment in new transmission capacities.



The following chart shows the results of the analysis of 360 conservation paths. The gray shaded area identifies combinations of conservation programs (other paths) that are different from the approved 2020 Conservation Potential Assessment and result in lower cost for City Light with more savings. The 2020 approved path

is indicated by the yellow dot. City Light will review and update these findings when we conduct our 2022 Conservation Potential Assessment. City Light will also include a Demand Response Potential and Customer-Installed Solar Potential assessment, the former of which is now explicitly required by CETA.

### Total Portfolio: Net Present Value Cost vs 2040 Energy Efficiency Achievement



# **Action Plans**

The utility is already making plans for the next year, next two years and next 10 years to meet federal and state regulations. Our plans include forwardthinking transportation electrification strategies, time-of-day pricing to improve energy efficiency, and more commercial customer energy efficiency through updating older buildings.

City Light will be evaluating both new demand response programs and new large customer renewable energy tariff offerings to complement programs for residential and commercial solar as well as adding more community outreach/proposed partnerships for new and existing energy services and plans. For our existing resources, City Light's efforts include steps for relicensing the Skagit River Hydroelectric Project, BPA engagement for a post-2028 contract, and leadership in efforts to develop organized regional market concepts and collaborate on regional resource adequacy.

City Light's intends to determine what roadblocks exist and what options need more research. All City Light performance objectives call for buy-in from both internal and external stakeholders and the public to conduct transparent evaluation of the alternatives, including those that result in more equitable outcomes for customers at reasonable costs and risks. The cornerstone of City Light's energy – 85% of the power mix in 2019 -is hydropower: a clean, renewable resource that has always been the region's most reliable, affordable and climate friendly resource.





# Next Steps: Building the 2022 Integrated Resource Plan

Today, the forecasts show that City Light's energy supply benefits from continued investment in customer energy efficiency programs, which enable our hydropower dams to support more alternative energy sources. We forecast that our energy supply is as high as 98% greenhouse gas free with long-standing and intensive focus on energy efficiency programs and procuring long-term energy supply from only clean and renewable sources.

City Light's work begins with gathering inputs, stakeholder and public engagement, ensuring alignment with plans for clean energy services, and more study, research, and analysis.

#### The steps include:

- 1. An updated demand forecast that reflects trends from the pandemic and City Light's Transportation Electrification Strategic Investment Plan.
- 2. Refinements to City Light's framework following the first complete and adopted set of CETA rules.
- 3. More insight into current renewable resource costs and delivery possibilities as City Light completes its first Renewable Resources Request for Proposals that will support a large customer renewable energy program.

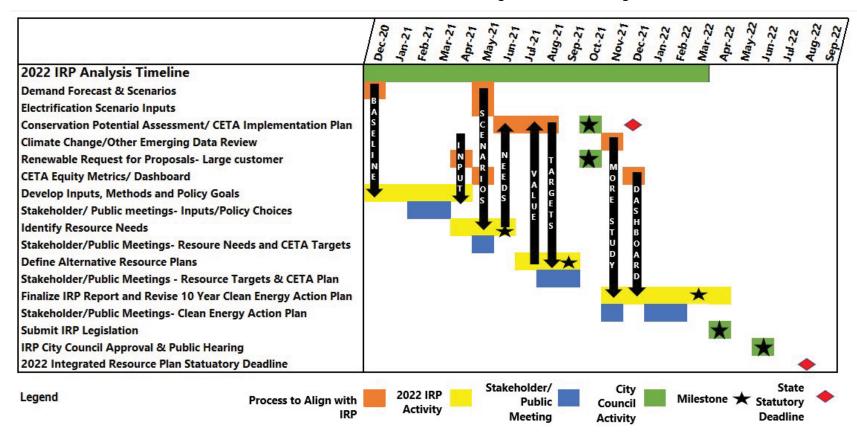
- 4. Continued engagement with stakeholders and the public to gather input along the way.
- 5. Final review of new NW Council and Northwest Power Pool Resource Adequacy data to update our RA market reliance study in the second quarter of 2021.
- 6. Refined Conservation and Demand Response Potential Assessments focused on what City Light can do to target demand-side resources to be even more complementary with our hydro resources.
- 7. New research into how customer-owned generation, demand response, and storage resources fit into the plan.

# Seattle City Light

# 2022 IRP Work Plan

Integrated Resource Plans are ambitious undertakings that must lock in inputs early while at the same time support and align with other consequential activities. The work is to develop a resource strategy that aligns with City Light's new Transportation Electrification Strategic Investment Plan and the 2022 Conservation and Demand Response Potential Assessment, and that considers the potential for building electrification – all while exploring options for other distributed resources such as battery storage and additional "behind the meter" solar. The work will prioritize identifying racial, social, and economic equity metrics. City Light will evaluate new climate change research but may be limited in the range of information that we can include in time for producing a 2022 IRP.

The following chart shows a high-level timeline with connection points between interrelated processes, important milestones and statutory deadlines, including required City Council engagement and desired stakeholder and public engagement. Stakeholder and public input will inform and improve City Light's recommendations. City Light endeavors to build an ambitious, customer-centric plan that brings affordability and better outcomes for those in our communities who have shouldered the weight of climate change.



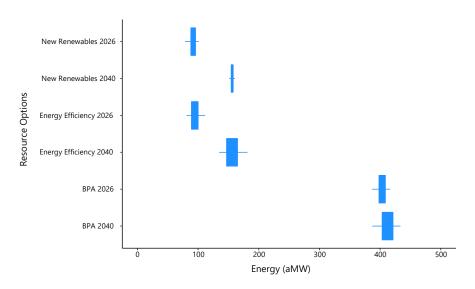




#### The 4-Year and 10-Year Long Range Plans

In accordance with the CETA, City Light will prepare two new plans. By Jan. 1, 2022, City Light will complete its first four-year Clean Energy Compliance Plan, required by CETA, to explain the steps City Light is taking between 2022 and 2026 to comply with CETA. Additionally, as part of the 2022 IRP, City Light will prepare a 10-year Clean Energy Action Plan. The Clean Energy Action Plan will benefit from new research as part of CETA to be better able to stress equitable access to clean energy and the benefits provided by same. It will examine supply and demand, and articulate choices City Light must make to ensure environmentally responsible, reliable, and affordable energy paths. These plans will have the benefit of a thorough and open approach to new ideas, technological innovations, regional cooperation, and the best minds of the region. They will expand on the foundations of the 2020 Progress Report and test plans.

City Light's Progress Report identifies a potential resource adequacy need that could be filled with the addition of more renewable energy and energy efficiency and fewer BPA resources. Therefore, the 2022 IRP will study this potential need and determine what solutions can address it, if needed. The chart below shows that by 2026, approximately 100 aMW of additional renewable energy would fill a resource adequacy void. Aligning new research in 2021, about the impacts of COVID, electrification potential, and Regional RA studies will help us determine whether these long-term resources are required for RA. City Light will also include demand response and battery storage options to see how these options can increase reliability and potentially lower costs.





#### City Light's other action plans to support the advancement of safe, reliable, affordable, and environmentally responsible energy services include:

#### **Existing Resources and Enhancing Market Practices**

- Ensure a well-functioning wholesale market that can enforce the provisions and rules of CETA with continued engagement in the Carbon Markets Workgroup in 2021. (two-year action).
- Sponsor and complete a proposed design for a Resource Adequacy Program with Northwest Power Pool members, increasing electric system reliability and affordability by pooling supply and demand to assist during stressed conditions.
- Relicense the Skagit River Hydroelectric Project by April 2025 and the South Fork Tolt Hydroelectric Project by 2027.
- Advocate for the US delegation to negotiate a new Columbia River Treaty seeking a fair distribution of benefits from treaty storage and operations.
- Collaborate in 2021 with the public power community and BPA on a post-2028 BPA contract, with a proposed final contract in late 2025 for a new contract starting Oct. 1, 2028.

#### **Equitable Distribution of Energy and Non-Energy Benefits**

- Prepare and review the City of Seattle's Racial Equity Toolkit with internal and external stakeholders. Use the toolkit to inform measures of social equity in the IRP process.
- Build a new team to identify impacted populations and develop metrics to track the distribution of the benefits of CETA.
- ➤ Launch a new public engagement campaign prioritizing impacted communities.

#### **Resource Acquisition**

- Implement a demand response program pilot, and update City Light's large commercial solar tariff by 2022.
- Early in 2021, conduct a Request for Proposals process for renewable energy to support a large customer renewable

energy program that would deliver new renewable energy to those customers in 2024.

- Develop a tariff and rate for the new large customer renewable energy program.
- ➤ Investigate future BPA product options.

#### **Modeling and Analysis**

- Update and refine modeling of clean energy policies in City Light's electric power price forecast.
- Include transportation and building electrification scenarios being developed by a separate City-wide electrification study process.
- Coordinate consistent inputs for evaluation of demand side resource potential at the distribution system level.
- Endeavor to include climate change sensitivity in the 2022 IRP with a plan to fully examine climate change in the 2024 IRP.

#### **10-Year Clean Energy Action Plan/CETA compliance/ I-937** Compliance

- Complete, before Jan. 1, 2022, a conservation and demand response potential assessment that provides targets for I-937 and the CETA compliance.
- ➤ Identify resource adequacy metrics and targets.
- Identify the use of social cost of greenhouse gas in the analysis.
- Develop metrics to understand impacts on vulnerable communities.
- ➤ Include how City Light will ensure coal is not included in our portfolio.
- Include how City Light plans to meet 2030 to 2045 greenhouse gas neutrality.
- Identify any transmission limitations preventing an affordable CETA compliance.





### Partnering in Public Engagement

City Light will be tasked with building its 10-year plan toward a greenhouse gas-free future, which will include valuable public input, Stakeholder Advisory Committee discussions, use of technology to make public engagement more convenient, and simpler information on how we can all access cleaner energy options and prepare for the future in (hopefully) a pandemic-free environment.

Plans call for the public to help contribute to a cleaner environment, not just in helping City Light make resource choices but making energy benefits more equitable for all.

In working with the Mayor and City Council, City Light wants to invite innovative new partnerships to help inspire our customers to become more active in creating a clean energy future. We want to support them in our mutual goals for a more sustainable and socially equitable future. By arming the public with basic information about City Light's existing supply and the types of resource choices ahead, everyone can be a conduit to a shared understanding and an active player toward a better quality of life.

#### When you talk with people about our energy future, these are the kinds of questions that will help us start the greater conversation:

- > Are you considering changes in the fuels you use? Why?
- Where do you go for information about your energy use today?
- What information will help you understand more about your own energy use?
- > Are you taking steps to be resilient to power outages?
- > How do you feel you are being impacted by climate change?
- Have you been impacted by service interruptions in the past year? How did they disrupt your life?
- What suggestions do you have for City Light to help lowincome and vulnerable customers?
- Do you want to be part of planning for our future energy supply?
- > What can we do to get you to be involved?

Our energy future will directly influence everyone's lives. Help us get ready.

Ask them to join the efforts by emailing us at SCL.IRP@seattle.gov





Seattle City Light provides our customers with affordable, reliable, and environmentally responsible energy services.

CUSTOMERS FIRST • ENVIRONMENTAL STEWARDSHIP • EQUITABLE COMMUNITY CONNECTIONS • OPERATIONAL AND FINANCIAL EXCELLENCE • SAFE AND ENGAGED EMPLOYEES



700 5th Ave, Seattle, WA 98104 Tel: (206) 684-3000 seattle.gov/light

#### SUMMARY and FISCAL NOTE\*

Department:	Dept. Contact/Phone:	<b>CBO Contact/Phone:</b>
Seattle City Light	Aliza Seelig/ 684-8458	Greg Shiring /386-4085
	Joy Liechty/ 615-1102	

\* Note that the Summary and Fiscal Note describes the version of the bill or resolution as introduced; final legislation including amendments may not be fully described.

#### **1. BILL SUMMARY**

**Legislation Title:** A RESOLUTION relating to the City Light Department; acknowledging and approving the 2020 Integrated Resource Plan Progress Report as conforming with the public policy objectives of The City of Seattle and the requirements of the State of Washington; and approving the Progress Report for the biennium September 2018 through August 2020.

**Summary and background of the Legislation:** City Light's 2020 Integrated Resource Plan (IRP) Progress Report continues to emphasize "conservation first" as its foundation. The Progress Report states that investments in conservation remain the first and best resource choice as the most environmentally responsible way to meet growing energy demands, resource adequacy and 100 percent carbon free regulations. It also provides a low-cost way to meet the Washington Energy Independence Act. For the 2022 Integrated Resource Plan Update, City Light will develop a 10-year Clean Energy Action Plan that outlines the steps the utility will take to maintain greenhouse gas neutrality, maintain equitable access to clean and affordable energy, and make progress towards being greenhouse gas free by 2045 to conform with the 2019 Washington Clean Energy Transformation Act. The 2020 IRP Progress Report was informed by the participation of internal and external stakeholders. The proposed Resolution approves the 2020 Integrated Resource Plan Progress Report for the biennium September 2018 through August 2020.

The 2020 IRP Progress Report was developed under the Code of Washington (RCW), Chapter 19.280 which mandates Integrated Resource Planning every two years. City Light has requested and received permission from the Washington State Department of Commerce to delay its completion of an updated IRP and instead complete an IRP Progress Report (the IRP would have been due on September 1, 2020). In addition to this one-time deviation from normal practice, the Department of Commerce also granted permission to extend the transmittal to City Council until December 31, 2020. City Light's decision to request this change was due both to the need to effectively incorporate and communicate provisions of the recently passed Clean Energy Transformation Act, and to the impacts of the COVID-19 pandemic.

Utilities within the state of Washington must develop comprehensive resource plans that meet their customers' electricity needs in the short and long term. Seattle City Light is required to file an Integrated Resource Plan, which is either a Progress Report, due every two years, or an updated Integrated Resource Plan due every four years. Progress Reports reflect

changing conditions and developments, whereas Integrated Resource Plans are comprehensive resource plans that explain the mix of generation and demand-side resources that the utility plans to use to meet their customers' electricity needs over the period covered in the plan.

In accordance with RCW 19.280, the 2020 IRP Progress Report requires the approval by the consumer-owned utilities' governing board after public notice and hearing and subsequent filing with the State of Washington Department of Commerce by March 31, 2021. A resolution to adopt the 2018 Integrated Resource Plan Progress Report was passed by the Seattle City Council in September 2018.

#### 2. CAPITAL IMPROVEMENT PROGRAM

Does this legislation create, fund, or amend a CIP Project? \_\_\_\_\_ Yes X\_ No

#### **3. SUMMARY OF FINANCIAL IMPLICATIONS**

Does this legislation amend the Adopted Budget?

\_\_Yes <u>X</u>No

**Does the legislation have other financial impacts to The City of Seattle that are not reflected in the above, including direct or indirect, short-term or long-term costs?** No.

**Is there financial cost or other impacts of** *not* **implementing the legislation?** The adoption of this resolution ensures that City Light meets the requirements of RCW 19.280.

#### **4. OTHER IMPLICATIONS**

- **a.** Does this legislation affect any departments besides the originating department? No.
- **b.** Is a public hearing required for this legislation? Yes. RCW 19.280.050 requires the utility's governing body to approve the Progress Report after it has provided public notice and hearing.
- **c.** Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation? No.
- **d. Does this legislation affect a piece of property?** No.

e. Please describe any perceived implication for the principles of the Race and Social Justice Initiative. Does this legislation impact vulnerable or historically disadvantaged communities? What is the Language Access plan for any communications to the public? This resolution describes a path for how City Light plans to meet its future power generation needs over the next 20 years and explains recent changes in conditions. When deciding how to implement plans City Light will continue to organize its plans and offer services to vulnerable or historically disadvantaged communities consistent with City policy.

#### f. Climate Change Implications

1. Emissions: Is this legislation likely to increase or decrease carbon emissions in a material way?

This resolution does not materially change Seattle's carbon emissions. City Light is explaining its plans to continue to serve customers with greenhouse gas neutral power, and how it will be developing a new plan to describe progress towards providing greenhouse gas free power by 2045.

2. Resiliency: Will the action(s) proposed by this legislation increase or decrease Seattle's resiliency (or ability to adapt) to climate change in a material way? If so, explain. If it is likely to decrease resiliency in a material way, describe what will or could be done to mitigate the effects.

This resolution does not materially change Seattle's ability to adapt to climate change.

g. If this legislation includes a new initiative or a major programmatic expansion: What are the specific long-term and measurable goal(s) of the program? How will this legislation help achieve the program's desired goal(s)?

This is not a new initiative or major programmatic expansion; this effort is consistent with Seattle City Light's commitment to serve our customers with safe, reliable, affordable, and environmentally responsible electric service.

#### List attachments/exhibits below:



# 2020 INTEGRATED RESOURCE PLAN PROGRESS REPORT

Transportation & Utilities Committee Review

Seattle City Light | February 3, 2021

### 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



Twenty-year Resource Plan to meet forecast demand



All utilities with >25K customers



Safe, Reliable, Clean, Equitable, Lowest Reasonable Cost



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



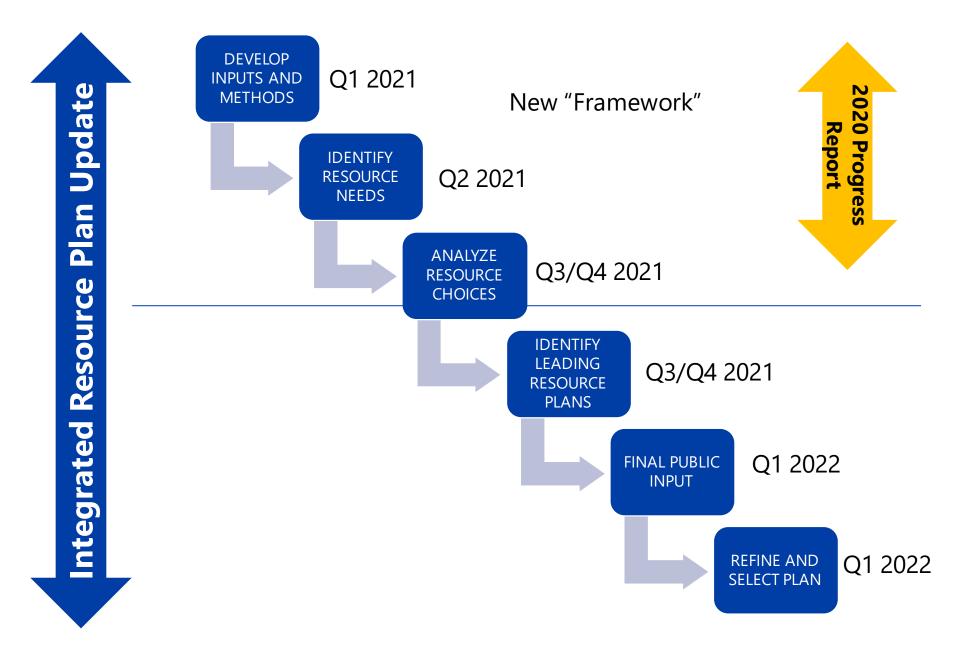
Public involvement



### 2020 PLANNING LANDSCAPE COURSE CHANGE TO PROGRESS REPORT

	Clean Energy Innovations	Significant growth in renewable energy and energy efficiency driving future energy supply growth
	Clean Energy Transformation Act	New Washington law with associated rules being written
	COVID-19	Adverse health, environmental justice, economic and energy demand impacts
200	Electrification	Climate change concerns transitioning choices and regulations in transportation and building energy use







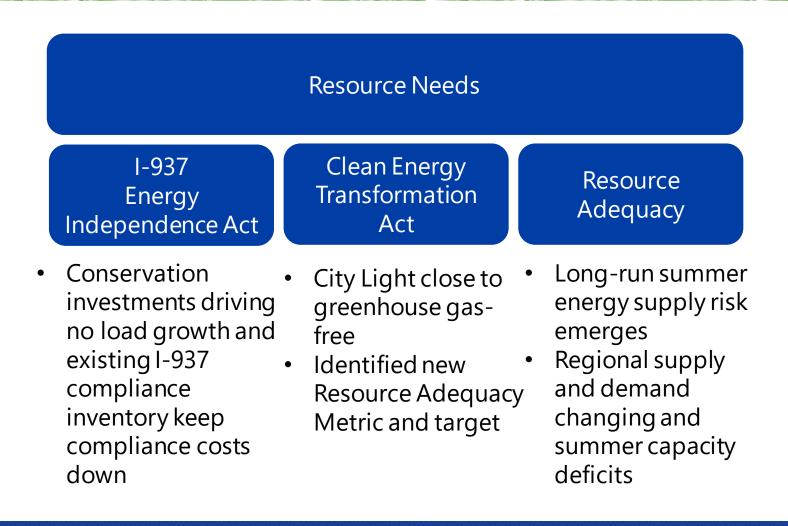
## THANK YOU TO OUR IRP TECHNICAL ADVISORS

- 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



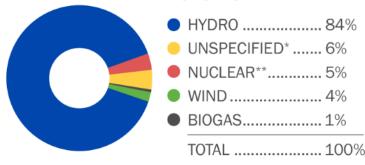
### NEW ENERGY FRONTIER REQUIRES MORE TARGETED FRAMEWORK





## CITY LIGHT'S CURRENT RESOURCES

**2019 POWER MIX** 



\*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.

#### **ENERGY RESOURCES**

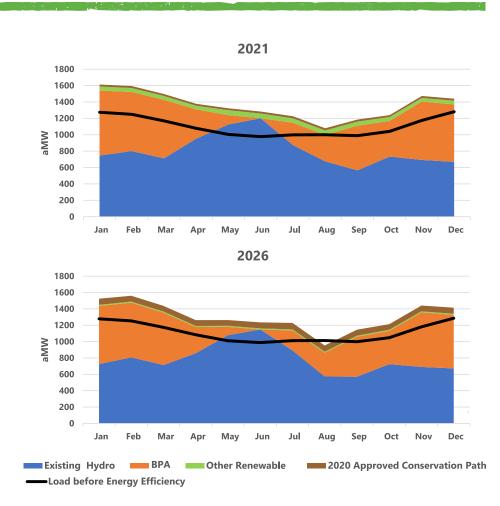


- Treaty Rights From British Columbia
- Long-Term Hydro Contracts (CBH is the Columbia Basin Hydropower)
- Other Long-Term Contracts



### 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









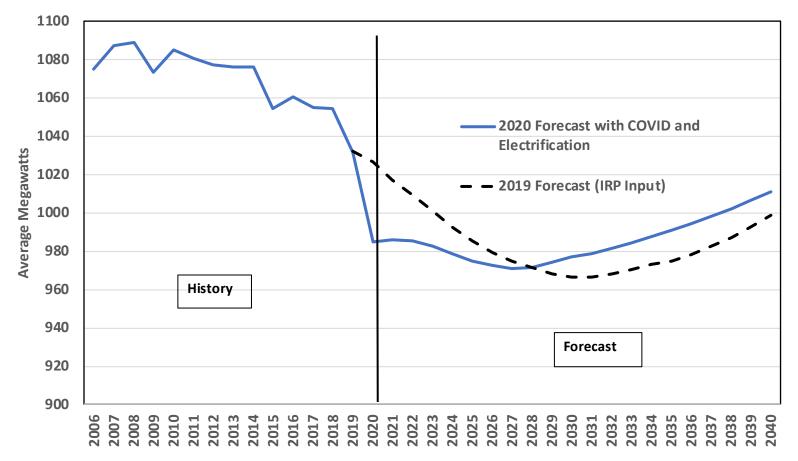
### PREPARING FOR THE 2022 IRP ACTION PLAN PRIORITIES AND CITY COUNCIL INVOLVEMENT

—	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



### PREPARING FOR THE 2022 IRP COVID-19 AND ELECTRIFICATION IMPACTS

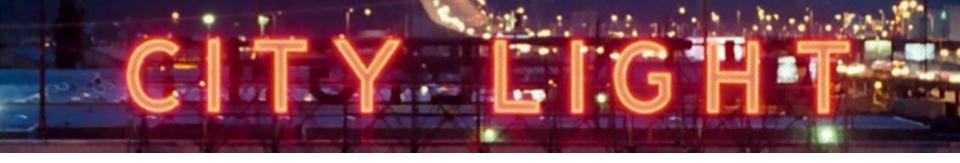
**Retail Load Forecasts** 



### 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





### 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

