

NOT YOUR TYPICAL SUBSTATION

Seattle City Light has designed a substation that will fit the neighborhood's character, advance community goals and serve as a model for environmental sustainability.

Though the majority of the site will be used for substation operations, City Light worked with the community and the Seattle Design Commission for two years to design a substation that will enhance the neighborhood. It will include over 44,000 square feet of open space, an elevated interpretive walkway, public art, an off-leash area, two community event spaces and numerous neighborhood streetscape improvements.



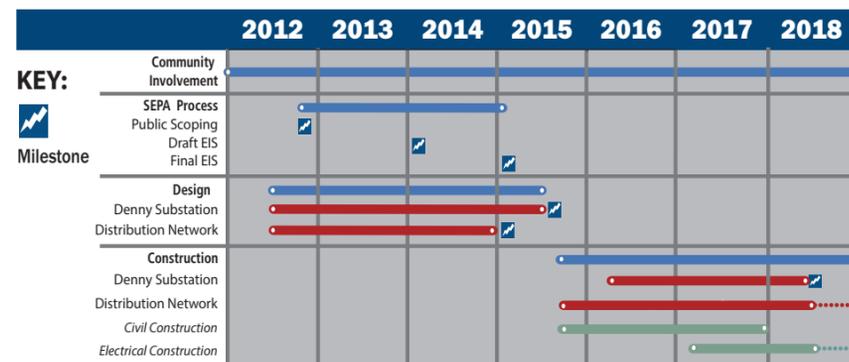
Looking east on John Street: the Denny Substation features gently sloping walls and translucent glass panels.

PROJECT TIMELINE:

Fall 2015: Denny Network construction begins

Early 2016: Denny Substation construction begins

Mid-2018: Construction of Phase 1 complete



*Schedule is current as of November 2015

VISIT OUR WEBSITE:
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Powering Seattle through the 21st century

Denny Substation Project

November 2015

KEEPING PACE WITH SEATTLE'S POWER NEEDS

Seattle is one of the fastest growing cities in the nation, and South Lake Union and Denny Triangle are among its fastest growing neighborhoods. New and expanding companies and institutions have created jobs and spurred demand for retail services and housing in this area, transforming it into a dense and dynamic hub of activity. The City has already made a number of investments to keep pace with this growth and now is making a major upgrade to the electrical system to meet the accelerating power needs of current and anticipated consumers.

Seattle City Light will construct a new electrical substation, its largest and its first in 30 years, near the intersection of Denny Way and Stewart Street. An underground distribution network will also be constructed to ensure more reliable power delivery to customers, and a transmission line will be built to carry power to the substation.

To realize the vision of a substation that fits with its vibrant urban surroundings, the utility conducted a two-year design process that included numerous public meetings, close consultation with stakeholders, and dozens of presentations to neighborhoods groups and organizations, yielding hundreds of public comments.

This extensive community involvement effort has resulted in a one-of-a-kind substation design that meets the needs of the utility and brings significant amenities to the neighborhood.

PROJECT BENEFITS

- Ensure reliable power
- Meet current and future electrical needs
- Support economic growth
- Provide system flexibility



The Denny Substation will also provide improved reliability and system flexibility, benefiting customers both in and beyond the project area.

INSIDE

KEY PROJECT ELEMENTS — PROJECT MAP — DESIGN — SCHEDULE



Denny Substation Project

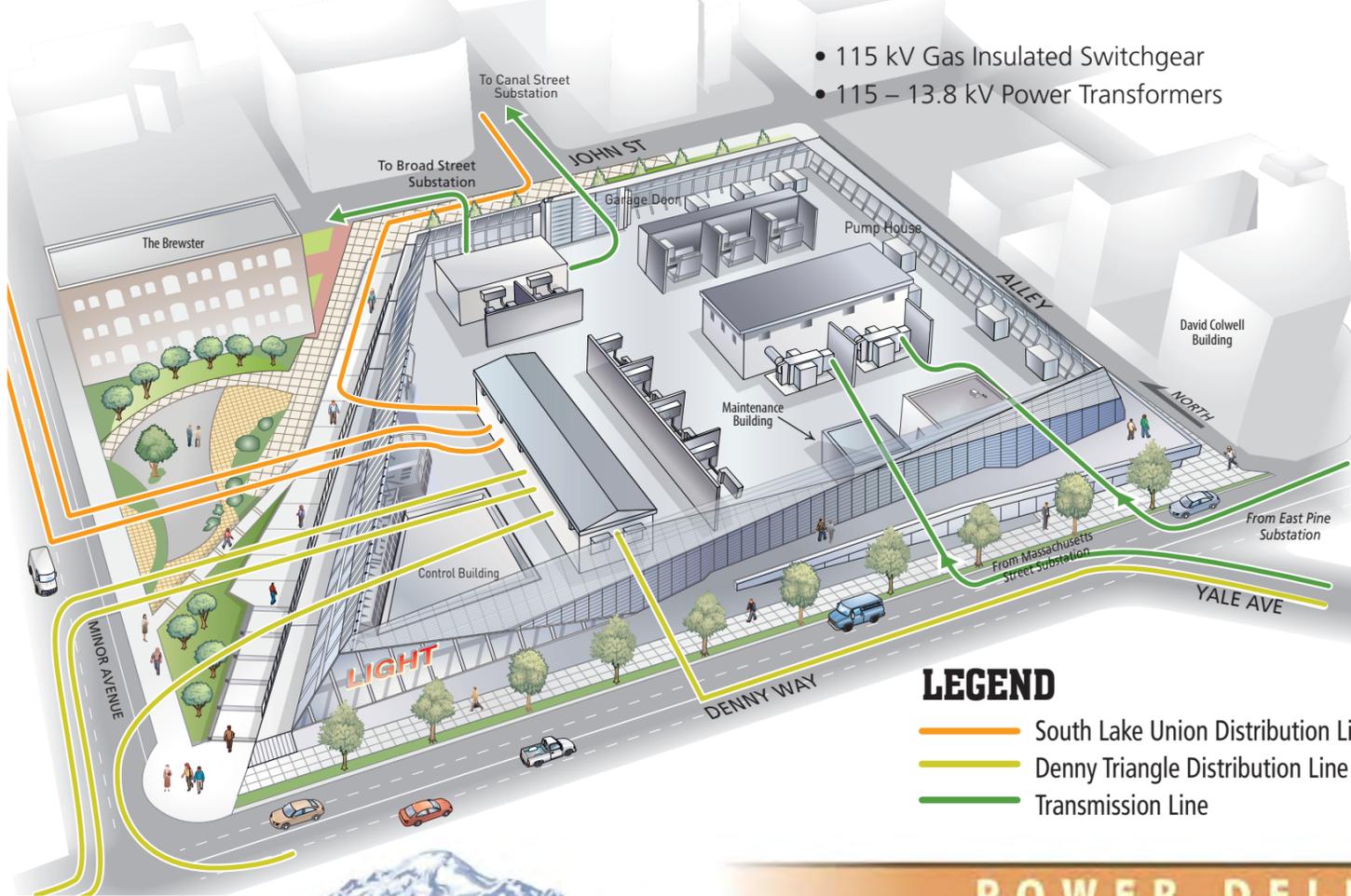
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Substation

Located on Denny Way near Stewart Street, the Denny Substation will serve the growing area of high-tech and bio-tech industries in South Lake Union, as well as other high-use customers across north downtown, and bring critical improvements to the regional transmission grid. The substation will include equipment such as:

- 115 kV Gas Insulated Switchgear
- 115 – 13.8 kV Power Transformers



LEGEND

- South Lake Union Distribution Line
- Denny Triangle Distribution Line
- Transmission Line



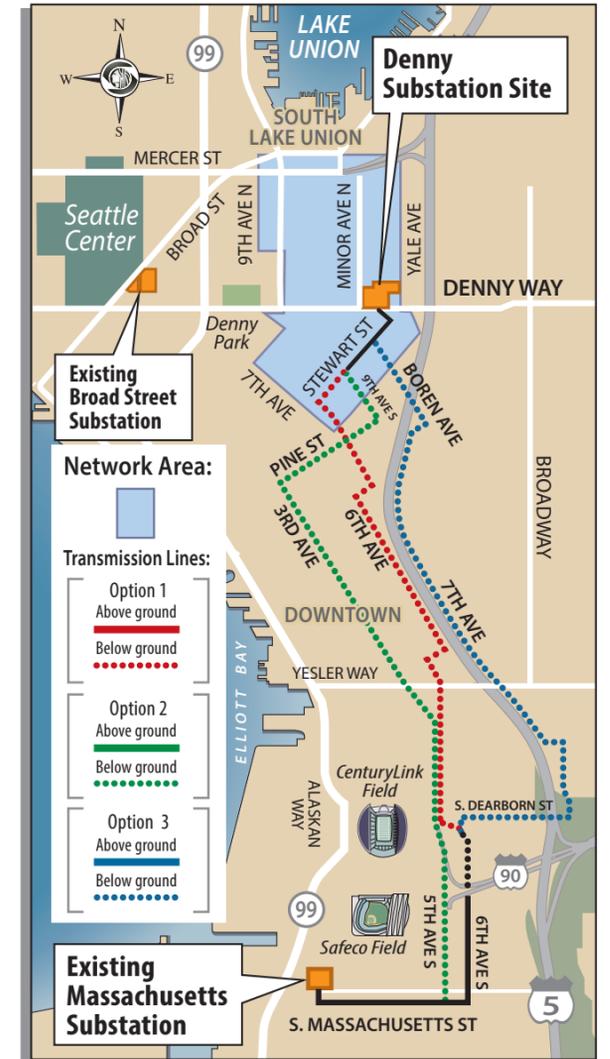
Distribution Network

City Light will serve the high load density areas in South Lake Union and the Denny Triangle using an underground distribution network (the Denny Network) similar to the system used in downtown and in Belltown. City Light will install underground network feeders and associated underground duct bank systems, connecting both new and some existing customers to the new service.



Transmission Line

Three possible routes for a new transmission line have been considered, and a preferred alternative route will be identified after further engineering and analysis. The transmission line will run approximately three miles between the Denny Substation and the Massachusetts Substation in SODO. When installed, the line will run at 115 kV, but it will be built to transmit 230 kV in the future.



POWER DELIVERY 101

