



Seattle City Light Finds One-Stop Shop in Leidos

With roots that reach back more than a century, Seattle City Light (SCL), the nation's greenest utility, is known for its reliability and sustainability. Those same qualities could describe the lasting relationship the public power provider enjoys with Leidos.

Over the past 20 years, Seattle City Light has turned to Leidos for expertise and assistance with a range of projects, including rates and financial planning, risk management consulting, distribution automation, transmission studies and underground transmission routing, as well as a 10-year project to rehabilitate Boundary Dam, for which Leidos developed the program plan and provided design and construction engineering services.

A multi-year, multidisciplinary On-Call Services Agreement signed in 2013 is the most recent evolution of this powerful partnership. Under the current agreement, Leidos provides on-demand resources to Seattle City Light in areas ranging from 230kV underground transmission line routings for a new substation, to ramping up for the coming wave of 5G joint use applications.

SEAMLESS STAFF AUGMENTATION

With more than 70 years of service to the utility industry, Leidos has become a go-to resource for innovative solutions and hands-on help — from program planning to detailed design and implementation.

Our proven track record at Seattle City Light made Leidos a natural choice when the utility needed additional hands on deck. The service agreement proved the perfect solution, offering world-class design and engineering services and the flexibility to staff up and pare down as needed.

Drawing from a deep bench of engineering talent, Leidos provides full-time professionals, both onsite and remote, to augment existing SCL staff in a variety of capacities. As staffing needs and our trusting relationship grew, SCL turned to Leidos for additional staff. A major selling point for SCL is Leidos' ability to anticipate their needs and deploy highly qualified engineering experts and support staff on demand and quickly bring them up to speed on Seattle City Light's programs, processes, and safety standards.

Acting as a seamless extension of the SCL team, Leidos has brought new energy, expertise and on-site assistance in several key areas.

SERVING UP SOLUTIONS IN SEATTLE

- > **Multi-year, multidiscipline On-Call Services Agreement in place since 2013**
 - > **Distribution engineering projects**
 - > **Construction support**
 - > **Street light design, maintenance and repair**
 - > **Joint pole use support, including 5G**
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DISTRIBUTION DESIGN SUPPORT

Tapping Leidos' technical expertise in designing 2.4 to 34.5 kV projects, distribution work is a major focus for Leidos' on-site engineering support. Under the service agreement, Leidos provides full-time engineering experts to perform the necessary reviews, structural analyses, design, make-ready work and other field support for pole design and replacement and other distribution projects. All projects are developed and executed to meet Seattle City Light and National Electrical Safety Code (NESC) standards, as well as any other applicable codes and regulations — all with an eye toward safety, schedule, and budget.



CONSTRUCTION SUPPORT

Our on-site engineering staff are frequently in the field providing construction support for Seattle City Light projects. Coordinating with utility management and contractors, our team members ensure utility infrastructure is built as designed.

Along with routine construction requests, the Leidos team is playing an active role in the massive, multi-billion dollar Alaskan Way Viaduct Replacement Project. Part of a key transportation route through the city, the viaduct was damaged in the Nisqually Earthquake in February 2001. As a matter of public safety, the State of Washington and the City of Seattle decided to demolish the viaduct and build a new tunnel that would reconnect the city with the waterfront.

To align with the construction schedule, the project required coordination and carefully timed relocation of critical SCL transmission and distribution assets along the roughly four-mile project corridor, as well as construction of new street lighting along the waterfront and new electric facilities to serve the Colman Dock Ferry Terminal.

With multiple moving parts, the high-profile undertaking required strong collaboration and communication between Leidos, SCL, and other key players, such as the Washington Department of Transportation and various contractors. Leidos played an important role in supporting safe demolition and construction by ensuring that energy delivery infrastructure serving the area was de-energized and re-energized at precisely the right times.



STREET LIGHT DESIGN & REPLACEMENT

Since 2016, Leidos has been an integral part of SCL's Street Light and Joint Use department, bringing technical expertise on street light design, pole attachments, and the overhead and underground electric supply that powers them. Our staff spearheaded efforts to clear a backlog of several hundred street light maintenance and repair requests.

JOINT POLE USE

From telephone companies to cable television, traffic cameras and more, roughly 100 organizations rent space for their equipment on street lights and utility poles

owned by SCL via joint pole usage agreements. To help manage this logistical labyrinth, Leidos provides field and office support to SCL's Joint Use/Collocates Team and insight on issues ranging from clearance and safety to maintenance and permitting.

Our team assists SCL with processing incoming applications for joint use engineering work on the infrastructure owned by SCL. This distribution design work can include application reviews, field visits/surveys, data gathering, make ready, pole structural analysis, design sketch/map, review, signature and stamp by a licensed Professional Engineer (PE), identifying required permits, Bill of Materials (BOM), and coordination with construction crews.

In early 2019, SCL reached out to Leidos to provide additional staffing to manage a voluminous request from Puget Sound Energy. To support its plans to remotely read gas meters, the natural gas provider sought to install Advanced Metering Infrastructure (AMI) equipment on street lights and distribution and transmission poles owned by Seattle City Light. Leidos immediately responded with an additional full-time engineer dedicated solely to reviewing joint use applications from Puget Sound Energy to ensure they meet SCL specifications, as well as NESC clearance requirements. Our representative then coordinates between the two utilities and construction crews to ensure the AMI attachments are installed properly.

AT YOUR BECK AND CALL

Leidos can trace its consulting relationship with Seattle City Light back to the 1940s and an SCL employee named Robert W. Beck. After working for Seattle City Light for 13 years, in 1942 Beck went on to launch R.W. Beck, a design engineering company, now part of the Leidos family. This legacy of service is a testament to long-lasting client relationships built on a foundation of trust and industry-leading solutions that have quite literally stood the test of time.



5G SUPPORT

With seven decades of utility experience, Leidos is a trusted advisor in helping utilities proactively prepare for coming regulatory changes including the FCC's 2018 regulation, "*Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment.*" Designed to facilitate improved speed and responsiveness of wireless networks, the FCC regulation paves the way for the cellular industry's rollout of fifth-generation (5G) services, which are expected to require roughly 10 times the number of pole attachments compared to previous technology.

The flood of new pole use requests related to 5G broadcast service will have a significant impact on utilities across the nation, and Seattle City Light is no exception. In fact, SCL is expecting about 2,000 new applications per year related to the 5G rollout. The sheer volume of new pole attachments present potential challenges related to clearance and capacity, as well as decisions on metering and more.

The Leidos team works closely with Seattle City Light to address these questions and provide expertise to assist in the management of the order intake process, as well as providing engineering review of the applications to ensure compliance with SCL and NESC standards.

BRIGHT MINDS. BOOTS ON THE GROUND.

From proactive preparations for the 5G rollout to managing day-to-day distribution design work, Leidos offers a one-stop shop under a single, multidisciplinary agreement.

For SCL, rather than hiring permanent employees to meet temporary needs, Leidos' on-call services offer the flexibility of on-demand staffing to meet emerging needs. And because SCL only needs to manage a single vendor, the arrangement also delivers convenience and cost savings. Regardless of the type of services provided, a sensitivity to the client's budget and schedule is a hallmark of every Leidos project.

For decades, our extensive utility industry experience, depth of engineering talent, and insight into the business and regulatory landscape have made Leidos a trusted part of the SCL team. We are proud to be a partner with Seattle City Light as they take on the next generation of challenges.

LET LEIDOS LEAD THE WAY

Utilities turn to Leidos when they need unbiased expertise and innovative solutions. Our design and analysis services are informed by decades of front-line experience with utilities like Seattle City Light. The energy experts at Leidos identify safe, reliable, environmentally sound solutions for a variety of utility projects, while helping owners navigate emerging regulatory challenges.

LEARN MORE

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