

UIL Holdings Corporation
157 Church Street
P.O. Box 1564
New Haven, CT 06506



UIL HOLDINGS

VIA ELECTRONIC MAIL AND U.S. MAIL

July 2, 2015

Mr. Robert Stein
Chairman
The Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Petition No. 1120 – The United Illuminating Company Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Modifications to the Hawthorne Substation at 180 Hawthorne Drive, Fairfield, Connecticut

Dear Chairman Stein:

Pursuant to Paragraph 1(e) of the Connecticut Siting Council's June 25, 2015 Decision and Order, The United Illuminating Company, subject to the approval of the Council, will utilize David Koehler and Stephen Reitz of Black & Veatch to evaluate runoff from the site, including effects on adjacent wetlands and abutting properties and to conduct an assessment of the effectiveness of the existing access road catch basin. Information concerning Black & Veatch and Messrs. Koehler and Reitz is enclosed for the Council's review.

Please do not hesitate to contact me should you have any questions concerning this letter.

Very truly yours,

Bruce L. McDermott

Bruce L. McDermott
Managing Counsel – Operations
UIL Holdings Corporation
On Behalf of The United Illuminating Company

cc: Service List

POWER DELIVERY

QUALITY SOLUTIONS FOR EVERY PHASE OF YOUR PROJECT





FULL SERVICE PROVIDER,
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FLEXIBLE, TAILORED SOLUTIONS

The power delivery industry is being challenged as never before. Black & Veatch understands the increasing demand for highly efficient and reliable professional services. We are a full-service provider that delivers value for any power delivery application.

By combining a long-standing reputation for planning and engineering excellence with strong procurement, construction and program management capabilities, Black & Veatch has become a trusted business partner across the industry. For decades, we have provided high-quality projects for our clients, safely and cost effectively, while meeting rigorous schedule requirements.

DIVERSE EXPERIENCE

System Studies and Planning

We have a seasoned team of experts with significant power system analysis and planning experience. Our capabilities, effective communication skills and cutting-edge analytical tools allow us to smoothly integrate your project into the complex grid system.

Overhead Transmission

Our broad experience across some of the most demanding terrain imaginable equips us to provide creative planning, routing, design and construction solutions to minimize environmental impact, ensure reliability and meet your cost and schedule requirements.

Underground Transmission

Our underground transmission system experience, including our ability to plan for and overcome complex engineering and construction challenges, allows us to

minimize your design, installation and maintenance costs, and ensure safe and reliable operation.

Substations

Our clients continue to depend on us to creatively apply advanced technology to all types of substation projects. As utilities work toward building a more efficient and intelligent system, our unique experience deploying both the physical and digital infrastructure for substations gives you flexible, proven solutions, regardless of project size or technology.

HVDC

As entities look to move large blocks of power over significant distances, many are embracing high voltage direct current (HVDC) solutions. Our extensive experience planning and installing all components of HVDC projects helps keep you at the forefront of this continuously evolving technology.

Renewable Energy Integration

The continuous growth of renewable energy generation requires creative planning and execution solutions to ensure the reliability and ongoing system performance of the electric grid. Our interconnection expertise, combined with our broad renewables technology experience, ensures that your renewable energy projects are successfully integrated.

BLACK & VEATCH IN ACTION

Led a joint venture that successfully completed a 136-mile, 345 kilovolt (kV) overhead transmission line engineering procurement and construction (EPC) project, improving reliability and system flexibility in the western United States. This project was a major segment of the Energy Gateway Transmission Expansion.

Providing long-term project management support to a utility partner responsible for electricity distribution to more than 320,000 customers in Connecticut, improving their asset management, operational efficiency and system reliability.

Completed a unique recabbling project that provided needed, additional capacity for existing high-pressure, gas-filled 115kV circuits. The project helped meet the increasing load in densely populated downtown San Francisco without damaging streets and sidewalks to replace existing lines.



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MANAGEMENT SOLUTIONS
FOR COMPLEX CHALLENGES**

LOCAL RESOURCES FOR GREATER RESPONSIVENESS

Black & Veatch has a strong national footprint, allowing us to quickly respond to our clients' needs, regardless of location. Our local resources enhance coordination and communication and bring a thorough knowledge of regional challenges and solutions to your business and technical requirements. We're expanding our presence across the country, allowing us to deliver additional tailored, local solutions.



BUILDING A WORLD OF DIFFERENCE®

Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. Our revenues in 2013 were US \$3.6 billion. Follow us on www.bv.com and in social media.

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REV 2014-07

David J. Koehler

David J. Koehler is currently assigned as a Senior Project Manager in the Power Delivery Business. He is responsible for management, administration, planning, and control of both engineering services, and engineering, procurement, and construction (EPC) projects associated with transmission and distribution systems.

REPRESENTATIVE PROJECT EXPERIENCE

Hawthorne Capacitor Bank Addition; United Illuminating; Fairfield, CT, United States

2015-2016

Project Manager. Manage EPC project that installs two new 115kV Capacitor Banks

Substation Projects; Ameren; Illinois and Missouri, United States

2013-2017

Project Manager. Manage the engineering of a 10 - 345kV substations associated with the 350 mile Illinois Rivers Project. These 10 substations are spread across the state of Illinois with one being located just over the border in Missouri. There are an additional 45 138kV substations that are electrically affected by the new 345kV line and major additions at these stations are also required and being

Transmission Line Project; United Illuminating; Milford, CT, United States

2013-2016

Project Manager of EPC Project. Manage the EPC project that includes construction of 115kV transmission line structures on the Metro North ROW. Structures will be installed adjacent to the existing MNR Catenary Structures.

Transmission and Substation Projects; American Transmission Company; Pewaukee, Wisconsin, United States

2001-2012

Portfolio Manager / Project Manager. Management of Alliance relationship with ATC including overall responsibility for Black & Veatch resource scheduling and forecasting. Project Management for 69, 138, and 345 kV substations and transmission line facilities. Major projects include engineering, procurement and construction of a 345 / 138 kV substation and a 69 kV GIS facility in Madison, Wisconsin. Responsibilities also include development of cost estimates and system design summary documents for use in the state permitting and licensing process.

SENIOR PROJECT MANAGER

Specialization:
Project Management

Education

Bachelors, Civil Engineering,
University of Nebraska, 1978

Professional Registration

2014, Connecticut,
Professional Engineer, 25295
2014, Kansas,
Professional Engineer, 9604

Total Years of Experience

36

Joined Black & Veatch

1979

Professional Associations

None

Language Capabilities

English

Selected Presentations & Publications

Please see the end of this document for details.

**East Shore Capacitor Banks; United Illuminating Company (UI);
New Haven, Connecticut, United States
2009-2011**

Project Manager. Project management of the EPC of modification to two 115 kV capacitor bank configurations required to mitigate transient recovery voltage issues. Responsibilities included assistance in permit preparation and management of the EPC contract.

**Broadway Substation Addition; UI; New Haven, Connecticut,
United States
2008-2011**

Project Manager. Project management of the EPC of a transformer and switchgear additions to an existing 115 kV bulk distribution substation. Responsibilities included assistance in permit preparation and management of the EPC contract.

**Trumbull Substation; UI; Trumbull, Connecticut, United States
2004-2008**

Project Manager. Project management of the EPC of a 115 kV bulk distribution substation. Responsibilities included assistance in state permit preparation and testimony and management of the EPC contract.

**Middletown-Norwalk; UI; Bridgeport, Connecticut, United States
2003-2008**

Project Manager. Project Management of a 345 kV GIS substation and 345 kV XLPE transmission system. Included preparation of conceptual designs, cost estimates, system component studies investigating system configuration alternatives, detail design, and construction management.

**T&D Services Alliance; Wisconsin Electric Power Company;
Milwaukee, Wisconsin, United States
1994-2006**

Engineer Manager / Project Manager. Project management for numerous 138, 230, and 345 kV substation and transmission line facilities. Projects included design of downtown Milwaukee 138 kV substations and installation of 138 kV underground transmission lines.

**Transmission Line Relocation Projects; Northern States Power
Company; Minneapolis, Minnesota, United States
1997-2004**

Project Manager. Project management of numerous 69, 138, and 345 kV transmission line relocation projects initiated by state and local road realignments.

Congress Street Substation Addition; UI; Bridgeport, Connecticut, United States

1999-2000

Project Manager. Project management of 115 kV substation addition including a 115 / 13.8 kV transformer and power distribution center.

Bridgeport Energy Switching Station; UI; Bridgeport, Connecticut, United States

1997-1998

Project Manager. Project management of 115 kV switching station used to interconnect an independent power producer's combustion turbine into UI's electrical system.

Allings Crossing Substation; UI; West Haven, Connecticut, United States

1992-1994

Project Engineer. Responsible for directing all design activities associated with a new 115 kV bulk distribution substation and transmission line tap.

Airport Substation; Hawaiian Electric Company; Honolulu, Hawaii, United States

1990-1992

Project Civil Engineer. Responsible for directing civil / structural design of substations including 138 kV underground duct bank and manhole system.

H-3 Underground Crossing; Hawaiian Electric Company; Honolulu, Hawaii, United States

1990-1992

Project Civil Engineer. Responsible for design of 138 kV underground transmission line section requiring riser structure design, duct bank, and manholes.

Sylmar HVDC Converter Station; Los Angeles Department of Water & Power; Sylmar, California, United States

1986-1990

Lead Civil Engineer. Responsible for all civil / structural design including superstructure, foundations, and electrical duct system.

Stanton Energy Center; Orlando Utilities Commission; Orlando, Florida, United States

1985-1986

Assistant Construction Manager. Construction contract management on the substation and associated transmission lines. Responsibilities included construction inspection and contract administration.

**Twin Bridges Substation; City of Alexandria; Alexandria,
Louisiana, United States
1981-1985**

Project Civil Engineer. Civil / structural design of substation and 138 kV overhead transmission lines.

**Rawhide Station; Platte River Power Authority; Fort Collins,
Colorado, United States
1980-1981**

Civil Engineer. Turbine generator pedestal and foundation design.

**Black Fox Station; Public Service Company of Oklahoma; Iona,
Oklahoma, United States
1979-1980**

Civil Engineer. Analyzed nuclear reactor containment vessel.

SELECTED PRESENTATIONS & PUBLICATIONS

Koehler David J. and Paul Nakagua. "Line Relocation for New Highway." Transmission and Distribution Magazine. September 1995.

Stephen M. Reitz

Stephen Reitz is a Lead Site Development Engineer, responsible for grading and drainage design, underground utility design, project siting, and permitting support. Additional duties include mentoring of site group members, review of project designs, and performing site design related activities for Energy, Power Delivery, and Telecom projects. Reitz has 19 years' experience in civil engineering with an emphasis on site development. Major responsibilities have included department management, budgeting, contract administration, proposal estimating, cost reporting, lead site engineer, and project reviews.

REPRESENTATIVE PROJECT EXPERIENCE

Pepco Bridge Replacement Projects; Pepco Holdings, Inc.; Maryland, United States

2015-Present

Lead Engineer. Stormwater permitting, calculations for structure sizing, floodplain modeling, erosion and sediment control design. Permit meeting with local agencies. Construction support.

Squab Hollow; FirstEnergy; Kersey, Pennsylvania, United States 2014-2014

Lead Engineer. Stormwater permitting calculations for grading and drainage design. Permit meeting with local agencies. Construction support.

West Reading; FirstEnergy; West Reading, Pennsylvania, United States

2014-2014

Lead Engineer. Stormwater permitting calculations for grading and drainage design. Permit meeting with local agencies. Construction support.

New Castle; FirstEnergy; Pittsburgh, Pennsylvania, United States 2014-Present

Lead Engineer. Stormwater permitting calculations for stormwater design. Support permitting work completed by 3rd party consultant. Construction support.

Grand River Dam Authority; Chouteau, Oklahoma, United States 2013-2014

Lead Engineer. Develop survey specification for site. Review survey information.

Mix Avenue; United Illuminating, Co.; Hamden, Connecticut, United States

2013-Present

Lead Engineer. Preliminary grading and drainage design. Meeting with city engineer to review stormwater permitting rules.

CIVIL / STRUCTURAL ENGINEER

Specialization:

Wind; Combustion Turbine; Coal; Renewable Energy

Education

Bachelors, Other,
Iowa State University, 1996

Professional Registration

2015, Maryland,
Professional Engineer, 46463
2014, Oregon,
Professional Engineer, 89574PE
2013, Ohio,
Professional Engineer, 77588
2008, Pennsylvania,
Professional Engineer, PE075616
2001, Iowa,
Professional Engineer, 15884

Total Years of Experience

19

Joined Black & Veatch

2008

Language Capabilities

German

Jordan Cove; Jordan Cove Energy Project, L.P.; Coos Bay, Oregon, United States

2013-Present

Lead Engineer. Grading and drainage design for project site. Estimate of quantities. Conceptual underground utilities design, oily waste, sanitary, process undergrounds, electrical.

Sibley Coal Pile Runoff Study; KCP&L; Sibley, Missouri, United States

2013-2013

Lead Engineer. Site walk down and review of current site. Preliminary designs to improve stormwater runoff quality.

EPE Siting Study; El Paso Electric; El Paso, Texas, United States

2013-2013

Lead Engineer. Siting trip to review potential sites, records, research. Report development meetings with client.

Meadow Brook; FirstEnergy; Stephens City, Virginia, United States

2013-2014

Lead Engineer. Construction support, grading and drainage design to support permitting by 3rd party consultant.

Mainesburg; FirstEnergy; Mainesburg, Pennsylvania, United States

2013-2014

Lead Engineer. Stormwater permitting calculations for grading and drainage design. Permit meeting with local agencies. Support permitting work completed by 3rd party consultant. Construction support.

Hayes; FirstEnergy; Sandusky, Ohio, United States

2013-2013

Lead Engineer. Stormwater permitting calculations for grading and drainage design. Permitting coordination with local agencies. Construction support.

Pootatuck; United Illuminating, Co.; Shelton, Connecticut, United States

2013-2015

Lead Engineer. Stormwater permitting calculations for stormwater design. Construction support.

Columbia; Columbia Energy Center; Portage, Wisconsin, United States

2011-2014

Lead Engineer. Columbia Energy Center AQCS; grading and drainage design for project site in Portage, Wisconsin. Develop calculations for site grading and drainage. Generate transportation study for lime hauled to site and fly ash hauled from site. Permitting design for WDNR and Town of Pacific permit requirements for stormwater. Design of underground utilities. Provide ongoing construction support to field.

Puget Sound Energy; Puget Sound Energy; Washington, United States

2011-2012

Lead Engineer. Puget Sound Energy (Telecom); site walkdowns for multiple telecom sites in Washington. Create scope of work documents based on walkdowns. Create site layouts and support construction

First Energy; FirstEnergy; Ohio, United States

2011-2011

Lead Engineer. First Energy; substation grading and drainage design in Ohio. Develop erosion control plan for construction of site.

Nevada Energy; Nevada Energy; Nevada, United States

2011-2011

Lead Engineer. Nevada Energy (Telecom)/ site walkdowns for multiple telecom sites in Nevada. Review sites for design flaws in layout.

Oglethorpe Power; Oglethorpe Power Company; Georgia, United States

2010-2011

Lead Engineer. Oglethorpe Power Company; Simple Cycle Siting Study in Georgia: Create a conceptual site arrangement for a 2-on-1 combined cycle power plant. Review and visit possible site locations. Review site development criteria for each potential site and prepare final report ranking these sites.

Ivanpah Solar Elect. - Due Diligence; Ivanpah Solar Electric Generating System; Primm, Nevada, United States

2010-2010

Lead Engineer. Ivanpah Solar Electric Generating System Due Diligence; Primm, Nevada: Assessment of preliminary project design drawings and associated design information for 3 power tower solar fields which generate 392 MW total.

Smarr; Oglethorpe Power Company; Smarr, Georgia, United States

2010-2010

Lead Engineer. Oglethorpe Power Company; Smarr - Smarr, Georgia: Develop an overall site plan and conceptual grading and drainage plan for a 2-on-1 combined cycle power plant. Prepare linear facilities alternative routing study and provide permitting support.

Solar Project Finance Due Diligence; 9-10 MW Solar; Ontario, Canada

2010-2010

Lead Engineer. 9 - 10 MW Solar Project Finance Due Diligence; Ontario, Canada: Assessment of preliminary project design drawings and associated design information for multiple photovoltaic solar sites.

Blue Wing Solar Due Diligence; Blue Wing Solar; San Antonio, Texas, United States

2010-2010

Lead Engineer. Blue Wing Solar Due Diligence in San Antonio, Texas: Assessment of preliminary project design drawings and associated design information for the 14 MW photovoltaic solar site.

Trilobite Solar; PG&E; Chambless, California, United States

2010-2010

Lead Engineer. PG&E; Trilobite Solar in Chambless, California: Develop an overall site plan and initial grading and drainage plan for 3 - 175 MW parabolic trough solar facilities.

New Generation Power Plant; El Paso Electric Company; El Paso, Texas, United States

2010-2010

Lead Engineer. El Paso Electric Company; New Generation Power Plant Siting Study in El Paso, Texas: Create a conceptual site arrangement for a 2-on-1 combined cycle power plant. Review and visit possible site locations. Review site development criteria for each potential site and prepare final report ranking these sites.

Rosehill to Sooner Transmission Line; Westar Energy; Kansas, United States

2010-2010

Lead Engineer. Westar Energy; Rosehill to Sooner Transmission Line in Kansas: Develop erosion control plans and detail drawings for transmission line corridor. Assist with SWPPP preparation and permitting.

Tonnece Substation; Grand River Dam Authority; Oklahoma, United States

2010-2010

Lead Engineer. Grand River Dam Authority; Tonnece Substation in Oklahoma: Develop erosion control plans and detail drawings for substation. Assist with SWPPP preparation and permitting.

South Heart Hydrogen Energy Project; South Heart Energy Development LLC; South Heart, North Dakota, United States

2009-2010

Civil/Structural Engineer. South Heart Energy Development, LLC: South Heart Hydrogen Energy Project in South Heart, North Dakota: Develop an overall site plan and conceptual grading and drainage plan for a coal gasification plant. Prepare design documents to support permitting.

Harry Allen & Chuck Lenzie Combined Cycle Plants; Nevada Energy; Las Vegas, Nevada, United States

2009-2009

Lead Engineer. Nevada Energy; Harry Allen and Chuck Lenzie Combined Cycle Plants in Las Vegas, Nevada: Estimation of quantities to support the proposal for the addition of parabolic trough solar facilities at the two existing combined cycle plants.

Starwood Solar 1; Starwood Solar 1, LLC; Tonopah, Arizona, United States

2009-2009

Lead Engineer. Starwood Solar 1 L.L.C., Starwood Solar 1 in Tonopah, Arizona: Estimation of quantities to support indicative cost estimate for a 290 MW parabolic trough solar site.

Various; Overland Park, Kansas, United States

2009-2009

Civil/Structural Engineer. Produced calculations, design specifications and BOQ analysis for various site grading and drainage related design. Performed contract administration, including shop drawing review. Supervised other engineers and technicians on the project design team and monitored specialty group activities.

Turkey Point Project; Florida Power & Light; Miami, Florida, United States

2008-2009

Civil/Structural Engineer. Florida Power & Light: Turkey Point Project in Miami, Florida: Site development work (including storm water design, ditch and culvert design) for a nuclear power plant.

Kusile Power Station; Eskom; Johannesburg, South Africa

2008-2009

Civil/Structural Engineer. Kusile Power Station, Eskom: Site development work (including storm and sanitary sewer design, road layout and design, grading, ditch and culvert design) for a six unit coal power plant.

Solar One; Johnson Controls, In.; Mercury, Nevada, United States

2008-2008

Lead Engineer. Solar One; Johnson Controls, Inc. in Mercury, Nevada: Develop an overall site plan and conceptual grading and drainage plan for a 140 MW parabolic solar trough facility. From these plans prepare a site specific bill of quantities.

Various; Overland Park, Kansas, United States

2008-2008

Civil/Structural Engineer. Produced calculations, specifications, BOQ analysis, and met with client for various site grading and drainage design. Compiled BOQ for initial project cost estimate. Completed site arrangement and general grading plan. Supervised technicians on project design team.

PREVIOUS EXPERIENCE

Various; Wright County, Iowa, United States

1998-2008

Civil/Structural Engineer--WRIGHT COUNTY ENGINEER'S OFFICE. Wright County, Iowa: Design and develop road and bridge plans for county road system. Prepare SWPPP, Floodplain Permit applications, wetland mitigation, stream crossing applications, and coordinate with state agency for permitting of county road projects.

Various; Goldfield, Iowa, United States

1996-1998

Civil/Structural Engineer--MURPHY FAMILY FARMS. Designed and developed site plans for hog confinement sites. Worked with growers/owners to utilize specific site location, worked with local public agencies to obtain driveway permits, review and satisfy permitting requirements for animal waste structures, and provided technical testimony for public hearings.