

STATEMENT OF QUALIFICATIONS

Engineering for Renewable Energy



About NLS

NLS Engineering is a growing firm located in Ontario, Canada, specialising in the renewable energy industry. We are a team of multi-disciplined engineering and integration experts with a focus on electrical design, SCADA, plant control programming, data management systems and commissioning.

Utilities and EPCs leverage NLS Engineering to reduce capital and O&M costs associated with building and operating solar and wind projects. We develop plant control and SCADA systems that are modern in appearance and sound in practice. We are intimately familiar with every engineering aspect from conception through to power generation.

Why NLS Engineering?

OUR PORTFOLIO

Substantial Experience

We have completed 1.5GW+ of utility solar SCADA design, programming, and commissioning in the United States and Canada in the past three years. Our focus is SCADA for renewable energy.

SUPPLY & INSTALL

Turnkey Hardware & Software

We supply SCADA servers, software, plant control PLC hardware, network panels, switches, fiber, MET stations, and inverter SCADA PCS panels.

OUR EXPERTISE

Comprehensive Services

We offer electrical engineering, PLC programming, SCADA, networking and telemetry, data management and reporting, commissioning and corporate systems integration.

END-TO-END

Project Management

We take a lead role throughout the life-cycle of a project. From planning and design, to implementation of control all the way to testing, commissioning and on-going support.

OUR REACH

Global Service Provider

NLS is structured to deliver projects globally. We can step in at any point in a project to maximise efficiency, quickly apply solutions to issues, and to aggressively drive projects to closure.

GET RUNNING

Seamless Commissioning

NLS averages a 4-5 day commissioning time for an 80MW solar site. We developed an advanced simulation suite to ensure a flawless logic and point check-out every time.

Our Services

Engineering Design

- ✓ Electrical, instrumentation & controls
- ✓ SCADA panel design and equipment specifications
- ✓ Fiber and copper structured cabling

Plant Control Programming

- ✓ Functional needs assessments and regulator/off-taker specifications
- ✓ Plant control strategy, optimization, and narrative development
- ✓ RTU configuration & PLC programming
- ✓ Voltage step testing, power factor, reactive power, grid support
- ✓ Active power control, automatic voltage regulation, and curtailment

SCADA

- ✓ SCADA design specifications, standards
- ✓ Process control narrative development
- ✓ System audits, Support & Maintenance
- ✓ Modern and intuitive HMI development
- ✓ Plant simulation & software Factory Acceptance Testing
- ✓ Data management and reporting
- ✓ Energy Management System
- ✓ Corporate systems integration

Networking & Telemetry

- ✓ Fiber/copper/wireless network and telemetry design
- ✓ Network and field device equipment specification & configuration
- ✓ Fiber termination, testing and certification
- ✓ NERC CIP compliance and reporting

Commissioning

- ✓ Cold/Hot commissioning test planning document development
- ✓ Pre-Commissioning site wiring, communications, server checks & verification
- ✓ RTU/Substation & SCADA operational point check-outs and plant tuning



Additional Engineering Services

Substations

- ✓ New substation design as well as system retrofit
- ✓ Utility interconnections, skid mounted, e-house or prefab building design
- ✓ Maintenance, rehabilitation, repair, extensions, and upgrades

Transmission & Distribution Lines

- ✓ Preliminary studies, network integration studies, and network planning
- ✓ Underground/overhead lines, HV line crossings, burial, equipment, and conductor sizing
- ✓ Structural & electrical design, technical specifications for procurement/construction
- ✓ Civil and electrical design, control and protection studies including environmental studies

Solar Farms

- ✓ Solar PV layout integration, grounding and power system studies
- ✓ Site preparation, grading, racking, and inverter building foundations
- ✓ Medium voltage collector systems and DC collector system design
- ✓ Complete substation design and tap line design for network interconnection
- ✓ Weather stations, equipment specifications, inspection and condition assessments
- ✓ P(90) yield estimates for greater accuracy of yearly performance estimating

Energy Storage

- ✓ Interconnection management and regulator assistance
- ✓ Civil and structural design, geotechnical analysis, pile/slab, fencing, and trenches
- ✓ Electrical design, power system studies, layout drawings and equipment specifications
- ✓ Control, communication and monitoring, voltage control and reactive power control
- ✓ Verification and compliance, supervision, and commissioning support

Wind Farms

- ✓ Collection system and substation engineering design and related system studies
- ✓ Interconnection studies, electrical layout design, protection and control design
- ✓ Cable optimization studies, civil design and foundation and electrical collection design
- ✓ Telecom network design and tower design

Testimonials

“NLS understands the big picture. I was continuously impressed with their professionalism, attention to detail and ability to stick to schedule.”

Joshua Rau

Senior Project Engineer
Hanwha Q CELLS

“One of the best SCADA companies I’ve worked with. They were able to solve challenging project issues to meet the utility requirements.”

Yousef Ali

Construction Manager
NextEra Energy

“The software developers at NLS are top notch. They’re experts at commissioning, and we saw a cost savings of at least 20-25%.”

Nischal Patel

SCADA SME
NextEra Energy

Project Experience

NEW MEXICO / NEXTERA ENERGY

Roswell Solar PV Site

NLS developed a comprehensive PV Solar SCADA system, with the project scope including plant control, networking, programming, engineering design, and commissioning.



FLORIDA / NEXTERA ENERGY

Manatee Solar PV Site

NLS completed a comprehensive SCADA implementation for NextEra Energy's 75MW Manatee solar site. The deliverables included plant control, networking, programming, engineering design, and commissioning.



ONTARIO / NEXTERA ENERGY

Elmira Battery Energy Storage Site

NLS completed plant control, networking, programming, and commissioning for NextEra's 2MW/8MWhr battery storage site. The deliverables also included a custom master battery management system (BMS) to maintain battery health.



ONTARIO / CAPSTONE INFRASTRUCTURE

Goulais River Wind Farm

NLS completed the SCADA implementation for the Goulais 25MW wind farm, including networking, programming, design & implementation, and commissioning. The site consists of 11 Siemens S113-2.3MW turbines.



Project - Solar PV	Customer	Location	Size
Wildflower	NextEra Energy	Florida	75MW
Loggerhead	NextEra Energy	Florida	75MW
Barefoot Bay	NextEra Energy	Florida	75MW
Blue Cypress	NextEra Energy	Florida	75MW
Hammock	NextEra Energy	Florida	75MW
Stuttgart	NextEra Energy	Arkansas	81MW
Indian River	NextEra Energy	Florida	75MW
Roswell	NextEra Energy	New Mexico	70MW
Citrus	NextEra Energy	Florida	75MW
Manatee	NextEra Energy	Florida	75MW
Whitney	NextEra Energy	California	20MW
Live Oak	NextEra Energy	Georgia	50MW
Babcock	NextEra Energy	Florida	75MW
Chaves	NextEra Energy	New Mexico	70MW
Westside	NextEra Energy	California	20MW
Coto Laurel	Solarworld Americas	Puerto Rico	10MW
Wainwright	Hanwha Q CELLS	Ontario	10MW
Mattawishkwia	Hanwha Q CELLS	Ontario	10MW
Kapuskasing	Hanwha Q CELLS	Ontario	10MW
Ramore	Hanwha Q CELLS	Ontario	10MW
14 Sites	Northland Power	Ontario	10MW/ea

Project	Customer	Location	Size
Elmira Battery Storage	NextEra Energy	Ontario	2MW/8MWhr
Stratford Battery Storage	Powin Energy	Ontario	12MW/40MWhr
Parry Sound Battery Storage	NextEra Energy	Ontario	2MW/8MWhr
ARDA Power DC Microgrid	ARDA Power	Ontario	100kW
Goulais River Wind Farm	Capstone Infrastructure	Ontario	25MW

Our Executive Team



PRESIDENT & CEO

Mark Presti

Mark is one of the founding partners of NLS Engineering and has over 20 years of experience in energy systems, manufacturing and water treatment. Coming from an entrepreneurial background complimented with a master's degree in engineering, he is responsible for the overall NLS business operations and executing global growth strategies.



VICE PRESIDENT – MARKETING & CORPORATE DEVELOPMENT

Mike Crawford

Mike is a senior partner at NLS Engineering with 18 years of multi-national experience in the energy and water markets. His background consists of a broad portfolio of corporate development, technical implementation and management. Mike is responsible for cultivating the NLS culture and ensuring the firm delivers continuous value.



VICE PRESIDENT – TECHNICAL SERVICES

Bob Loncar

Bob is a senior partner at NLS Engineering with 18 years of industrial automation, process engineering and SCADA experience. Bob is responsible for providing NLS technical teams with direction and best practices, and he mandates core principles including innovation, continuous learning, and abstraction.



VICE PRESIDENT – SALES

Shaheen Y. Maldar

Shaheen Y. Maldar is responsible for sales growth for NLS Engineering. With his international connections and over 20 years of experience in enterprise sales, he has a deep understanding of the challenges companies face today and the expertise to help our customers navigate the digital transformation in industries such as Automotive, Food & Beverage, Discrete Manufacturing and Utilities including Renewables.



1.800.369.0213
info@nlsengineering.com

735 S Service Rd, A2-201
Hamilton, ON L8E 5Z2, Canada

