End-to-end Smart Grid Consulting for New Brunswick Power

Siemens PTI Consulting now offers strategic business consulting in extension to its traditional technical consulting services. The services include the development of an optimum business strategy and the related implementation planning, considering the utility’s strategic targets and relevant technical and economical criteria. In combination with Siemens PTI’s comprehensive technical expertise this enables Siemens PTI to take a unique and leading position in the area of Smart Grid consulting services.

The benefits of a holistic consulting approach are evident with the partnership between Siemens and New Brunswick (NB) Power, an integrated utility that serves nearly 400,000 customers in the province of New Brunswick, Canada. NB Power is cooperating with Siemens for a ten-year Smart Grid Reduce and Shift Demand (RASD) modernization plan with the aim of improving both grid operation as well as the economic situation for the utility and its customers. One key aspect is to reduce the significant spread between summer and winter demand peaks – with the winter peak being extremely high due to the cold climate and the predominant use of electric heating. The replacement of old equipment, investment in new technologies, and education of customers will result in a higher control over the energy consumption and significant cost savings on both ends. This plan has a strong return on investment and is a pioneer project in the field of Smart Grids.

As an integrated utility, NB Power was looking for a partner who has the required holistic view to provide thorough and well-founded advice throughout the entire modernization project. President and CEO of NB Power Gaetan Thomas explained, “We wanted a partner that could do everything. There are very few players that have the complete integration model. Although there is enough evidence around the world to show that the component parts of the Smart Grid work, it is the integration of all the parts that has to be done. And Siemens is the perfect partner to help us achieve that.”

Within the framework of the contract, Siemens will support the design and implementation of the respective Smart Grid road map. The services include engineering, consulting, project management, quality assurance and process support. In January 2014, Siemens opened a Center of Competence (CoC) and research center in Fredericton, the capital of New Brunswick, to provide all services locally. Among the 40 man project team members are three PTI consultants who already developed the roadmap for the project based on the Smart Grid Compass methodology and are now supporting the implementation phase.

The Smart Grid Compass was developed by Siemens as a holistic framework for the development and realization of Smart Grid related strategies and implementation programs. It combines a comprehensive knowledge model based on the international experience of Siemens’ engineers along the complete energy value chain, with a structured and proven methodology.

In the context of this key project, the Head of Siemens PTI, Dr. Ali Haj-Fraj, was invited to speak at the Premier’s State of the Province Dinner at the Fredericton Convention Center on January 30, 2014. Dr. Haj-Fraj highlighted the importance of this modernization project. He concluded, “Utilities far and wide will look to New Brunswick and NB Power for ideas on how they can transform their business models in times where customers are becoming ever increasingly aware of having access to affordable, reliable and secure energy. NB Power’s innovative and pioneering management is creating a unique approach that will bring the best value for their customers.” Dr. Haj-Fraj also announced details on the R&D cooperation between Siemens and the Universities of New Brunswick and Moncton: Siemens will invest up to 2.5 million Canadian Dollars into academic research projects focusing on Smart Grid technologies and concepts. Siemens PTI is proud to contribute to this project’s success with end-to-end consulting which combines both Siemens’ leading expertise in Smart Grid technology and an innovative business consulting approach.

1 Junior Isles, “Realising a smart vision,” The Energy Industry Times, December 2013, pg. 9-11
2 Video: Roger’s TV (Dr. Haj-Fraj’s speech starts at 25:15 min)