Comparison of Fuel Cell Installation Methods at Large Commercial and Industrial Sites

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Abstract : Using fuel cell technology to generate electricity for large commercial and industrial sites is a growing segment in the fuel cell industry. The installation of these systems involves design, permitting, procurement of long-lead electrical equipment, and construction involving multiple utilities. The installation of each fuel cell system requires the same amount of coordination as the construction of a new structure requiring a foundation, gas, water, and electricity. Each of these components provide variables that can delay and possibly eliminate a new project. As the manufacturing process and efficiency of fuel cell systems improves, so must the installation methods to prevent a 'bottle-neck' in the installation phase of the deployment. Installation methodologies to install the systems vary among companies and this paper will examine the methodologies, describe the benefits and drawbacks for each, and provide guideline for the industry to improve overall installation efficiency.

Keywords: construction, installation, methodology, procurement

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