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## FOR IMMEDIATE RELEASE

### Green Generation Solutions' Dr Amir Mortazavi Co-Authors *Handbook of Liquefied Natural Gas*

Bethesda, Maryland | March 4, 2014

Green Generation Solutions wishes to congratulate Amir Mortazavi, PhD on his contributions to the recently published book, *Handbook of Liquefied Natural Gas*. He co-authored Chapter 4 of the Handbook entitled *Energy and Exergy Analyses of Refrigeration/Liquefaction Cycles*. The following is an abstract of this chapter:

Liquefied natural gas (LNG) plants are massive energy consumers. Approximately 8% of the feed gas to the LNG plants is consumed by the liquefaction process. Most of the LNG plant energy consumption occurs in the compressor drivers where fuel energy (usually natural gas) is converted to mechanical work (or electricity in electrically driven compressors). Due to the energy consumption scale of the LNG plants, any enhancement to the energy efficiency of LNG plants will result in a significant reduction in gas consumption and, consequently, CO<sub>2</sub> emission. There are two ways to increase the energy efficiency of natural gas liquefaction cycles: liquefaction cycle enhancement and driver cycle enhancement.

Liquefaction cycle enhancements reduce the required compressor power and accordingly the compressor driver's fuel consumption. Driver cycle enhancement reduces the amount of fuel consumption to generate a specific amount of power. The objective of this chapter is to reduce the energy consumption of the natural gas liquefaction cycle through process optimization and cycle enhancement. Optimization is briefly introduced and applied to the natural gas liquefaction cycle and driver cycle. Several energy enhancements options and waste heat utilization options are discussed and applied to the natural gas liquefaction cycle.

Dr Mortazavi's efforts in authoring this chapter were considerable. His work and research support GreenGen's work engineering and implementing CHP/CoGen plants that lower our clients' operating costs and environmental footprint. We congratulate him on this achievement and look forward to his upcoming publications.

For further information, go to <http://amzn.com/0124045855>

#### ABOUT GREEN GENERATION SOLUTIONS, LLC

Green Generation Solutions, LLC, based in Bethesda, Maryland, is an international firm that optimizes building profitability by engineering and implementing comprehensive, integrated energy efficiency solutions that lower operating costs while improving sustainability. Clients include governments, opportunity funds, private equity firms and REITs.

The company believes that every business can be more profitable by making energy decisions backed by comprehensive analysis, collaborative planning, and ongoing measurement of results. Our customized energy solutions are engineered and implemented using proven and disruptive technologies with the purpose of improving the efficiency of our clients' facilities and their overall corporate sustainability, while at the same time lowering their operating costs. We believe data should drive decisions, and sustained behavioral change will ensure success.

For more information about Green Generation Solutions, please visit [www.greengenerationsolutions.com](http://www.greengenerationsolutions.com).

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