

BRIGHTSTAR SOLID WASTE AND ENERGY RECYCLING FACILITY: AN INNOVATIVE WASTE TO ENERGY TECHNOLOGY

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ABSTRACT

The Brightstar Environmental Solid Waste and Energy Recycling Facility (SWERF) is a municipal solid waste (MSW) to energy facility utilizing a gasification (pyrolysis) process. At this time, the only operational SWERF is in New South Wales, Australia. While pyrolysis of MSW is not in itself new, the Brightstar technology is believed to have reached a sufficient level of development, and to incorporate sufficient new features, to qualify as new and cutting edge. This paper presents findings from a trip to Australia to inspect the facility, as well as the results of a Request for Proposals process for a municipal client in Florida. Analysis includes process, environmental, and economic factors.

1.0 INTRODUCTION

In August of 2001, representatives (the "team") from Malcolm Pirnie, Inc. and Collier County Government (Collier County, Florida) traveled to Australia in order to investigate the Brightstar Environmental Solid Waste and Energy Recycling Facility ("SWERF") technology. SWERF is an innovative gasification technology for managing municipal solid waste ("MSW"). At this time, the only operational SWERF is in Wollongong, New South Wales ("NSW"), Australia.

Subsequent to this investigative site visit, Collier County Government issued a Request for Proposals ("RFP") soliciting competitive proposals from firms to design, build, own (with the option to transfer), operate, and finance a MSW processing and gasification facility for residential and commercial solid waste generated in the County.

2.0 BRIGHTSTAR ENVIRONMENTAL

Brightstar Environmental LLC ("Brightstar") is a partnership between Energy Developments Limited and BSC Holding Company, the United States company that commercialized the pyrolysis and steam reforming gasifier integral to the SWERF process.

Energy Developments Limited ("EDL"), the parent company of Brightstar, is an integrated energy company that engages in the development and management of an international portfolio of energy projects, with a particular focus on renewable and waste fuels.