

## 1.0 INTRODUCTION

This Environmental Assessment (EA) provides the results of a study on the potential environmental impacts from construction and operation of state-of-the-art coal mine gas recovery and utilization technologies on property owned by Eastern Associated Coal Corporation in western Monongalia County, WV. If approved, the U.S. Department of Energy (DOE) would implement a cooperative agreement with Northwest Fuel Development, Inc. (Northwest Fuel) of Oswego, OR to demonstrate that coal mine waste methane emissions could be collected for use as a fuel for electric power generation and processed for distribution in commercial natural gas pipelines. In March 2000, DOE issued a competitive solicitation (DE-PS26-00NT40767) to facilitate the development of coal mine waste methane recovery and utilization technologies. In response to this solicitation, Northwest Fuel Development, Inc. submitted a proposal to install a waste methane collection and processing system which would produce two streams of useable methane. A low quality methane stream would be used to fuel on-site combustion engines and associated generator sets to produce electricity. A high quality stream would be processed for distribution by a local commercial natural gas pipeline.

The proposed project would demonstrate that coal mine waste methane emissions could be utilized as a fuel for electric power production. It would also demonstrate that waste methane could be economically processed into pipeline quality methane capable of being added to an existing distribution system for eventual sale and utilization. The coal mine waste methane would otherwise be vented to the atmosphere contributing to global warming, so the proposed project would also demonstrate the feasibility of reducing methane emissions from mining operations in a manner that is economically attractive to U.S. mining operations. The resulting demonstrations would provide coal and energy companies with cost-effective commercial technology systems for effective recovery and utilization of coal mine methane emissions.

The purpose of the EA is to determine if the proposed action could potentially cause significant impacts to the environment. If potentially significant impacts are identified, and if they cannot be reduced to insignificance or avoided, then a more detailed Environmental Impact Statement would be prepared. If no significant impacts are identified, a Finding of No Significant Impact would be prepared and made available to the public, along with the EA itself, before the proposed project proceeds.

This study was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321 *et seq.*), the Council on Environmental Quality's Regulations [Title 40, Code of Federal Regulations (CFR), Parts 1500-1508], and the Department of Energy's NEPA Implementing Procedures (Title 10, CFR, Part 1021).

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