# VI.A.7 Southern Nevada Alternative Fuels Demonstration Project\*

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\*Congressionally directed project

# **Objectives**

- Lease two (2) Ford H2ICE (hydrogen internal combustion engine) buses, based on the Ford E450 platform.
- Demonstrate the reliability and efficiency of a hydrogen bus in a day-to-day operation under extreme conditions over a two year period.

# Contribution to Achievement of DOE Technology Validation Milestones

Proprietary information from Ford Motor Company for technology validation of DOE's milestones is not available.

# **Accomplishments**

- Contract with Ford Motor Company is signed.
- Buses were delivered and training is completed.



#### Introduction

The City of Las Vegas is leasing two experimental hydrogen engine buses for two years from Ford Motor Company for the purpose of helping both Ford and the City demonstrate and evaluate the performance characteristics of these types of vehicles. The buses will be operated in the City's downtown corridor. Operating the buses in the summer heat of Las Vegas and the cold of our winters will provide a good indication of performance under the effects of widely varying temperatures. Reliability of the technology is also a key component of this demonstration project.

Ford Motor Company trained City of Las Vegas staff on how to perform diagnostics and repairs on the buses as directed by Ford. Bus drivers and fleet personnel were trained on how to fuel the vehicles and on maintenance and documentation procedures. First responders were given an overview of the H2ICE bus system and specific information related to handling possible emergency situations.

# **Approach**

The City of Las Vegas will record information related to vehicle performance and fuel efficiency. Ford Motor Company will track limited real-time diagnostic information, along with additional diagnostic information collected with on-board devices.

#### Results

To date the buses are not placed in service. Due to contract negotiations with Ford and available delivery time, the buses were not received until mid-June 2007.

# **Conclusions and Future Directions**

The City of Las Vegas will track performance and fuel economy, and perform maintenance on the vehicles while they are in service.