

# Regional Transit CNG Facility

## Fact Sheet

### **1993 CNG Fueling Facility**

- \$3.5 million initial cost
- Initial system was designed to fuel 125 buses in eight hours at an average rate of 2.5 minutes per bus.

### **1999 CNG Upgrades**

- \$2.1 million for installation
- \$1.8 million for additional equipment
- \$1.0 million for design of upgrades
- Addition of new controls, four new product lines, and new compressor discharge control panels insures simultaneous fueling at up to four dispensing locations.
- Equipment includes new Vacuum & Bus Wash Systems. Upgraded CNG & Supporting systems can fuel & service 215 CNG buses per eight-hour shift.

### **PG&E Natural Gas Transportation Services**

- Dedicated transmission-pressure supply pipeline from local distribution company.
- Gas supplied at 400 pounds per square inch (PSI).

### **Third Party Gas Procurment**

- RT negotiates a fixed price procurement services agreement through the State of California to supply fuel.

### **Emergency Shut Down System**

- Automatically stops fueling operation in case of an emergency.
- Ensures fail-safe operation.

### **Gas Dehydrator**

- Suction-side gas dryer to remove excess moisture from transmission pipeline gas.
- Dryer is equipped with automatic dew-point controls.
- Twin Tower Regenerative Design ensures redundant capacity and fail-safe operation.

### **Compressors**

- Two new CNG compressors supplement three upgraded CNG compressors.
- Compressors compress to 4250 PSI.

### **Buffer Vessels**

- Buffered storage increased from 30,000 cubic feet (CF) rated at 4,000 PSI to 60,000 CF rated at 5,500 PSI.
- Buffered storage provides capability for future light duty CNG fueling.

### **Dispensers**

- Replace two automotive fleet style CNG dispensers with four industrial transit style CNG dispensers.

### **RF Fluids Management System**

- Radio frequency (RF) fluids management system to automatically control, measure, and track: vehicle ID, mileage, CNG, engine oil, automatic transmission fluid, and coolant.
- System queries bus via RF link to gather ID, mileage, “on-board” CNG fuel cylinder pressure, and “on-board” CNG fuel cylinder fuel temperature to facilitate real-time temperature compensated fill control and results in longer range and lower overall costs.
- System tracks fuel and fluids and automates both daily and monthly summary reports.

### **Control Room Master Control Panel**

- Upgraded PLC master control panel controls and monitors all equipment and systems.
- System includes operator interface PC equipped with graphical user interface software to annunciate and acknowledge system faults and status.
- Operator interface PC provides “dial-in” capability for maintenance and administrative staff.



**For information call 321-BUSS**



**Regional Transit**