

## **FARMINGTON INSTALLS ELTEC SOLAR POWERED EMERGENCY VEHICLE CAUTION SYSTEM USING 3 HEAD SIGNALS**

Farmington, New Mexico built a new fire station off a very active four lane US highway. When the trucks exited the station it required them to enter the busy highway. The fire trucks were having a difficult time entering the highway even with their emergency lights flashing. The City desired to implement a traffic control system that would allow the trucks to easily enter highway safely.

Installation of an intersection controller and traffic lights was one solution considered. However this option was extremely expensive with having to run power to the controller cabinet from the station. Since the station was approximately 200 feet from the highway; just running the wires would be at considerable cost.

Stephen Krest of the City of Farmington's Traffic Engineering Department contacted ELTEC to determine if ELTEC could provide a solar powered solution that would use the traditional 3 section head with red, amber, and green LEDs. Since the highway was 4 lanes, the city preferred to use a mast arm over two lanes with a pole on each side of the highway. On each mast arm they wanted to mount a 3-section head horizontally over each lane as well as a 3-section head vertically on each pole. Additionally, Farmington also wanted a verification light on the pole located across the highway facing the station exit. The truck driver could see/verify that the highway traffic lights were indeed red. The criteria required that the system had to be wireless and activated remotely from the fire station.



ELTEC designed a system that fulfilled all requirements. Through the use of its proprietary latching circuit, countdown timers, and wireless controls, ELTEC was able to design a system that displayed a green light at all times (24/7) to the motorists except when a fire truck is departing the station. Upon receiving an emergency call, the control system is activated by the firemen using a push button in the fire station. When the highway beacon cabinet receives the signal from the transmitter in the station, the green light goes to yellow, then to red. The duration of the time that the amber and red lights are on is completely adjustable by the user. By allowing the user to define the time of activation for each light, the system allowed the firemen to ready themselves and advance the truck to the road with the right amount of staging time.



Both the Traffic Engineering Division and the Fire Department are very pleased with the new system. With this new traffic control system, cars always stop for the red lights.