

ITEM# 16
DATE: 10-27-15

COUNCIL ACTION FORM

SUBJECT: SINGLE-SOURCE PURCHASE FOR UNINTERRUPTIBLE POWER SUPPLIES FOR TRAFFIC SIGNAL PROGRAM

BACKGROUND:

A project is programmed in the FY 2015/16 Traffic Signal Program budget to conduct system upgrades at various traffic signal locations around Ames. There are several intersections in the network that are still structurally sound and do not require full replacement, however, they are in need of modernization of the technical components used within the cabinet. The City of Ames has a standard for uninterruptible power supplies (UPS) at all new or replacement traffic signals using the Tesco model 22-000BBS equipment. This system was determined to be the best available product through product demonstrations and field tests conducted by Traffic staff. It should be noted that Tesco products, in the Midwest region, are only available from one source, Mid-American Signal, Inc., of Kansas City, Kansas. Currently, there are 14 intersections using the Tesco unit out of the 66 signalized intersections Citywide (approximately 21% of the system has been upgraded - See Attachment 1).

Standardizing this equipment ensures consistency in the maintenance and operation of traffic signals in the City of Ames. Staff keeps replacement batteries and parts for the UPS systems in stock for routine maintenance activities throughout the year. These UPS systems provide vital protection for the sensitive technical components in the cabinet that are susceptible to damage from spikes in electrical power. UPS systems will also run traffic signals during power outages for 8 hours (on average) running full colors (normal operation) or potentially a week in flashing-red operation. Because of these reasons, it is in the City's interest to continue to use Tesco UPS equipment as the City of Ames standard for back-up power and power protection at all city owned traffic signals.

Currently, the cost for equipping a signalized intersection with a UPS system is quoted to be \$5,713 (equipment only). The total cost to purchase UPS systems for the 9 intersections identified in FY 2015/16 (Attachment 1) is estimated to be \$51,417. The project is funded with \$150,000 from Road Use Tax funds. This will bring the number of intersections with UPS systems to 25 of 66, or 35% of the system. **City of Ames Purchasing Polices state that single-source purchases of \$50,000 or more must be approved by City Council.**

ALTERNATIVES:

1. Waive the purchasing policy and approve the single-source purchase of nine Tesco Modal 22-000BBS systems for the FY 2015/16 Multi-Modal Roadway Improvements program at a cost of \$51,417 (for equipment only) from Mid-American Signal, Inc., of Kansas City, Kansas.
2. Reject the request to waive purchasing policies and direct staff to seek alternative methods for the procurement of UPS systems.

MANAGER'S RECOMMENDED ACTION:

The standardization of certain traffic signal equipment used city-wide provides safety and operational benefits as well as cost savings for the City of Ames. Staff will continue to use this standard equipment until such a time that a better field-tested and proven product becomes available in the market.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.

Attachment 1

**Intersections with UPS
(As of 10/20/2015)**

13th & Northwestern
13th & Ridgewood
13th & Stange
6th St. & Brookridge Av.
Duff Ave & Main St
Grand Av & 20th Street
Grand Av & 28th Street
Lincoln Way & Ash
Lincoln Way & Dotson
Lincoln Way & Hayward
Lincoln Way & Sheldon
Lincoln Way & Union
Mortensen & Dotson
SE 16th & S. Dayton

FY15/16 Proposed Installations

13th and Grand
Duff and 13th
Lincoln Way and Duff
Lincoln Way and Grand
Lincoln Way and Lynn
Lincoln Way and University
Lincoln Way and Welch
S. Duff and Airport Rd
S. Duff and S. 16th