



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Adopt a Resolution Authorizing the Purchase of Uninterrupted Power Systems (UPS) for Traffic Signals (\$77,500); and Appropriate Funds for the Project

MEETING DATE: February 21, 2001

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That City Council adopt a resolution authorizing the purchase of Uninterrupted Power Systems (UPS) for traffic signals, and appropriate funds in accordance with the recommendations shown below.

BACKGROUND INFORMATION: With the likelihood of more power outages during this energy crisis, the Public Works and Electric Utility departments have evaluated the need for back-up power for the City's traffic signals. Staff contacted several UPS vendors and recommends a system manufactured by Meyers Custom Products at locations where the signal should run in full operation. At locations where operation in red flash is satisfactory, a system designed by ElectroTech is recommended.

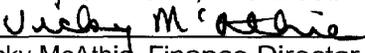
Twenty-five of the forty City-operated signals will be affected by rolling blackouts. Staff reviewed these intersections based on traffic volumes, number of approach lanes, vehicle speeds, and whether the intersection is located along a major corridor through the City. Based on this review, staff recommends running twenty signals in full operation, with the remaining five operating in red flash (Exhibit A). The cost for full-operation units are approximately \$3,250; and flash-only units are \$1,300 per intersection. These units can be installed within the existing traffic signal cabinets. The installation will be performed in-house, and those costs are not included. With these units, full operation can be maintained between 1-1/2 to 2 hours. In the event of a power outage exceeding this limit, the unit will automatically switch to flash operation. Flash-operation units will run a minimum of 4 hours. Once installed, the only maintenance these units will require are the replacement of batteries approximately every five years. Sets of replacement batteries for flash-only units are \$240 and \$635 for full-operation units. Prior to the purchase of the full-operation units, staff will be installing and testing a demonstration unit.

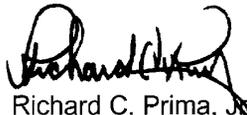
The reason we can fully operate our traffic signals using battery power is entirely due to our conversion from incandescent illumination to the use of Light Emitting Diodes (LED's), which has also dramatically reduced the cost to operate our traffic signals. We are one of the few agencies in California who have switched to all LED illumination; however, Caltrans will be converting to LED indications this summer as part of Governor Davis' plan to reduce the state's power consumption. Staff has contacted Caltrans regarding their Highway 12 signals, and they are open to considering back-up power for their signals. Until their signals are equipped with LED's, they can only run in a flash operation using battery power. Staff will be considering specifying UPS for all future City-operated signals installed. We should also note that this backup will not operate the luminaires (street lights) that are mounted on many signal poles.

APPROVED:


H. Dixon Wynn -- City Manager

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FUNDING: Requested Appropriation: \$77,500
Funding sources form Miscellaneous Traffic Improvements,
Miscellaneous Traffic Operations Improvements, and Electric Utility Operations Fund
Funding Available: 
Vicky McAthie, Finance Director


Richard C. Prima, Jr.
Public Works Director


Alan Vallow
Electric Utility Director

Prepared by Rick S. Kiri, Senior Engineering Technician and Rob Lechner, Customer Programs Manager

RCP/AV/RSK/RL/pmf

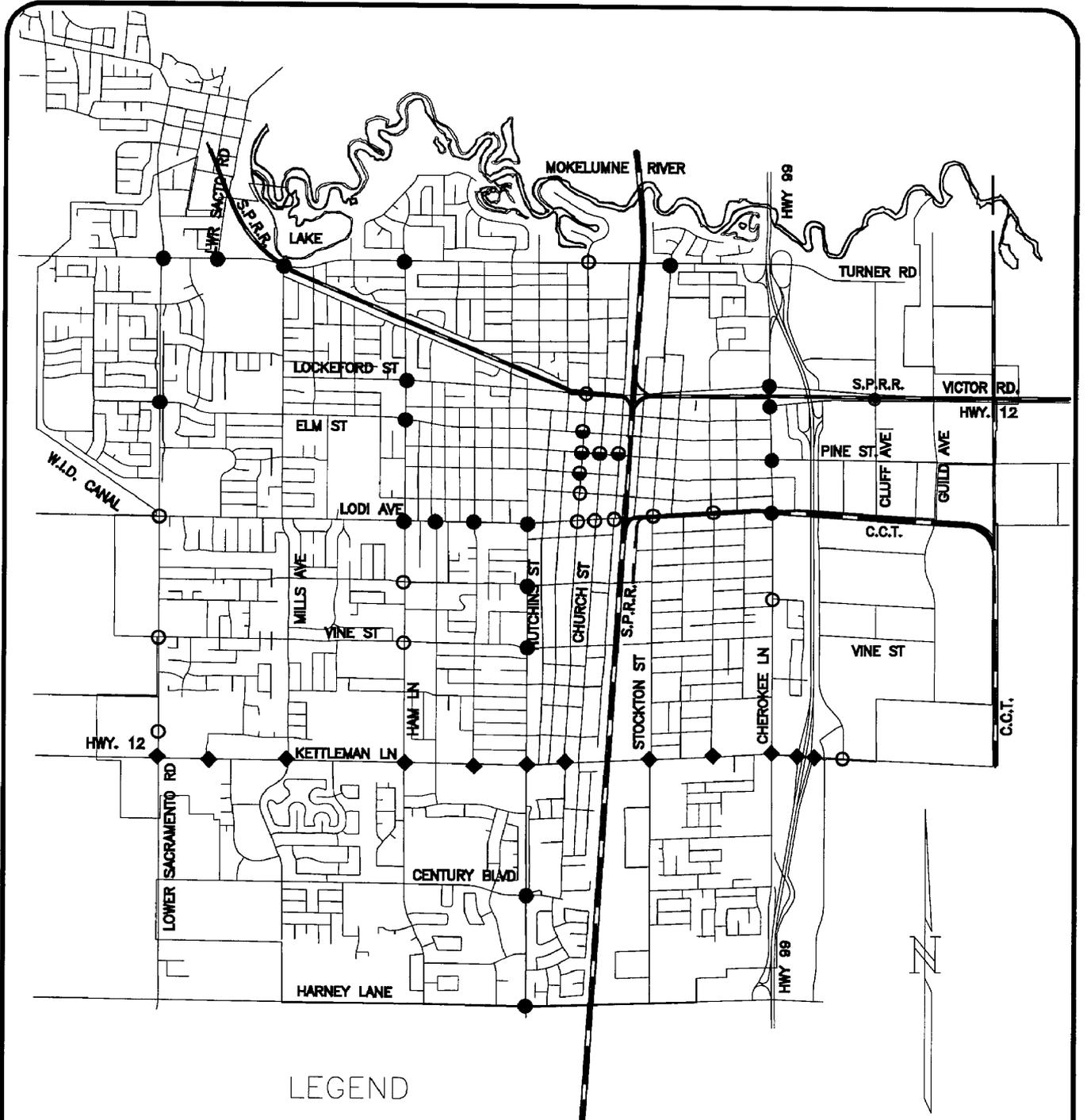
Attachment

cc: City Attorney
Police Chief
Fire Chief
Electric Utility Director
City Engineer
Street Superintendent
Associate Traffic Engineer
CSO - Biskup
Customer Programs Manager - Lechner
Technical Services Manager – Kerekes
Electricians – Aadland, Roper



CITY OF LODI
PUBLIC WORKS DEPARTMENT

Traffic Signals
Power Back-up



LEGEND

- - full operation
- - flash operation
- - not affected by blackouts
- ◆ - Caltrans Signal

NOT TO SCALE

RESOLUTION NO. 2001-35

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING
PURCHASE OF UNINTERRUPTED POWER SYSTEMS (UPS) FOR
TRAFFIC SIGNALS, AND FURTHER APPROPRIATING FUNDS
FOR THE PROJECT

WHEREAS, Lodi Municipal Code, §3.20.070, authorizes dispensing with bids for purchases of supplies, services or equipment when it is in the best interest of the City to do so; and

WHEREAS, with the likelihood of more power outages during this energy crisis, the Public Works and Electric Utility Departments have evaluated the need for back-up power for the City's traffic signals; and

WHEREAS, staff contacted several UPS vendors and recommends a system manufactured by Meyers Custom Products at locations where the signal should run in full operation, and at locations where operation in red flash is satisfactory, a system designed by ElectroTech is recommended; and

WHEREAS, twenty-five of the forty City-operated signals will be affected by rolling blackouts; and

WHEREAS, staff has reviewed these intersections based on traffic volumes, number of approach lanes, vehicle speeds, and whether the intersection is located along a major corridor through the City; and

WHEREAS, staff recommends running twenty signals in full operation, with the remaining five operating in red flash. The cost for full-operation units are approximately \$3,250, and the flash-only units are \$1,300 per intersection, and can be installed within the existing traffic signal cabinets, with the installation being performed in-house; and

WHEREAS, full operation can be maintained between 1-1/2 to 2 hours, and in the event of a power outage exceeding this limit, the unit will automatically switch to flash operation, which will run a minimum of 4 hours.

NOW, THEREFORE, BE IT RESOLVED, that the Lodi City Council hereby approves the purchase of twenty (20) Uninterrupted Power Systems (UPS) for Traffic Signals from Meyers Custom Products for locations where the signal should run in full operation, and five (5) from ElectroTech for locations where operation in red flash is satisfactory, in the amount of \$77,500.00; and

BE IT FURTHER RESOLVED, that funds in the amount of \$77,500.00 be appropriated from funding sources from Miscellaneous Traffic Improvements, Miscellaneous Traffic Operations Improvements, and Electric Utility Operations Fund.

Dated: February 21, 2001

I hereby certify that Resolution No. 2001-35 was passed and adopted by the City Council of the City of Lodi in a regular meeting held February 21, 2001, by the following vote:

- AYES: COUNCIL MEMBERS – Hitchcock, Howard, Land, Pennino and Mayor Nakanishi
- NOES: COUNCIL MEMBERS – None
- ABSENT: COUNCIL MEMBERS – None
- ABSTAIN: COUNCIL MEMBERS – None


SUSAN J. BLACKSTON
City Clerk