

DATE ISSUED: May 11, 2001

REPORT NO. 01-094

ATTENTION: Honorable Mayor and City Council
Docket of May 15, 2001

SUBJECT: Power (Battery) Back-Up Systems at Top 115 Priority Intersections

REFERENCE: None.

SUMMARY

Issue - Should the City Council approve the transfer and expenditure of \$690,000 from CIP 52-330.0, Sorrento Valley Road/Industrial Ct. to Carmel Valley Rd., to Street Division Operating Fund 10440, Dept. 940, Org. 2604, for the purpose of installing power (battery) back-up systems at 115 signalized intersections?

Manager's Recommendation - Approve the transfer and expenditure.

Other Recommendation - None.

Fiscal Impact - Due to the urgency of the request to initiate this project, the necessary funding of \$690,000 will temporarily be moved from CIP 52-330.0 because no unallocated funds are available. It is anticipated that the appropriation will be returned to the project as soon as possible with either future revenues generated over budgeted amounts, or future expenditure savings.

BACKGROUND

The City of San Diego has 1,410 signalized intersections. Due to the rolling blackouts, the signalized intersections are turned into four way stops. This abrupt change in the function of the intersection is resulting in some motorist confusion and increases the potential for accidents. The installation of a power (battery) back-up system at an intersection will allow the continued normal operation in the event of any power loss. This project will provide the installation of battery back-up units at the 115 highest priority intersections. The first 39 intersections, located adjacent to freeways, are based on avoiding traffic back-up on the freeways. This is to prevent an accident from occurring by a vehicle traveling at a high rate of speed approaching an intersection that has lost power. The next 65 signals are at railroad/trolley crossings with railroad preemption. This will prevent traffic from interfering with the crossings, getting stuck on the tracks, or back-ups. The remaining 11 intersections are based on high volume vehicles and/or pedestrians. Attached is the list of these intersections.

The selection of these 115 intersections is based on fiscal constraints. After these 115 intersections, other intersections can continue to be prioritized based on high volume prime arterial streets, high volume major streets, other major streets, etc. The City could continue the

installation of the power (battery) back-up systems on a multi-year basis to gradually retrofit all 1,410 signalized intersections. In addition, the City can institute a requirement that all new traffic signals include battery back-up. After this project, we will evaluate and continue to seek solutions in addressing power outages at intersections; however, additional future installations will be based on fiscal constraints and the ongoing energy situation.

CONCLUSION

The rolling blackouts are expected to continue indefinitely and may even increase in frequency. Not enough notice is given to allow City staff to provide temporary stop signs or other traffic control measures at all of the impacted intersections. The power back-up systems will allow for normal traffic operation and minimize the potential of an accident due to a power outage.

ALTERNATIVE

The 115 intersections can be reduced or increased at an average cost of \$6,000 per intersection.

Respectfully submitted, D. Cruz Gonzalez Director, Transportation		Approved: George I. Loveland
---	--	------------------------------

LOVELAND/SIERRA/VO

Attachment: 1. List of Intersections Installation of Power (Battery) Back-up Systems

LIST OF INTERSECTIONS
INSTALLATION OF POWER (BATTERY) BACK-UP SYSTEMS

Corridor	Intersection	
1.	I -15	Rancho Bernardo Road @ West Bernardo Drive
2.		Rancho Bernardo Road @ Bernardo Center Drive
3.		Mira Mesa Boulevard @ Westview Parkway
4.		Carmel Mountain Road @ Penasquitos Drive
5.		Mira Mesa Boulevard @ Scripps Ranch Boulevard
6.		Carroll Canyon Road @ Business Park Avenue
7.		Carroll Canyon Road @ Maya Linda Road
8.		Miramar Road @ Kearny Mesa Road
9.		Aero Dr @ Murphy Canyon Road
10.	SR -163	Clairemont Mesa Boulevard @ Kearny Mesa Road
11.		Clairemont Mesa Boulevard @ Kearny Villa Road
12.		Clairemont Mesa Boulevard @ Murphy Canyon Road
13.		Mesa College Dr @ Health Center Drive
14.		Friars Road @ Frazee Road
15.		Friars Road @ Avenida De Las Tiendas
16.		9th Avenue @ Ash Street
17.		10th Avenue @ A Street
18.		10th Avenue @ B Street
19.	I - 5	1st Avenue @ Elm Street
20.		6th Avenue @ Elm Street
21.		28th Street @ Boston Avenue
22.		Carmel Mountain Road @ El Camino Real
23.		Carmel Valley Road @ Sorrento Valley Road
24.		Del Mar Heights Road @ High Bluff Road
25.		Del Mar Heights Road @ El Camino Real
26.		Garnet Avenue @ Bluffside Avenue
27.		Garnet Avenue @ Damon Avenue
28.		Garnet Avenue @ West Mission Bay Drive
29.		La Jolla Village Drive @ Villa La Jolla
30.		Via de la Valle @ Flower Hill Mall
31.		San Andres Drive @ Via de la Valle
32.	I - 8	Camino Del Rio North @ Mission Center Drive
33.		College Avenue @ Canyon Crest Drive
34.		Fairmount Avenue @ Mission Gorge Road

Corridor **Intersection**

35.	I - 805 Boulevard @ 33rd Street	El Cajon Boulevard @ Illinois Street	36.	El Cajon
37.		47th Street @ Imperial Street		
38.	SR-94	16th Street @ F Street		
39.		College Avenue @ Judy McCarty Way		
40.		C Street @ India Street		
41.		C Street @ Front Street		
42.		C Street @ 1st Avenue		
43.		C Street @ 2nd Avenue		
44.		C Street @ 3rd Avenue		
45.		C Street @ 4th Avenue		
46.		C Street @ 5th Avenue		
47.		C Street @ 6th Avenue		
48.		C Street @ 7th Avenue		
49.		C Street @ 8th Avenue		
50.		C Street @ 9th Avenue		
51.		C Street @ 10th Avenue		
52.		C Street @ 11th Avenue		
53.		C Street @ 12th Avenue		
54.		12th Avenue @ Broadway		
55.		12th Avenue @ E Street		
56.		12th Avenue @ F Street		
57.		12th Avenue @ G Street		
58.		12th Avenue @ Market Street		
59.		Commercial Street @ 16th Street		
60.		Commercial Street @ 19th Street		
61.		Commercial Street @ 25th Street		
62.		Commercial Street @ 28th Street		
63.		Commercial Street @ 30th Street		
64.		Euclid Avenue @ Market Street		
65.		Euclid Avenue @ Naranja		
66.		Kettner Boulevard @ Broadway		
67.		Kettner Boulevard @ G Street		
68.		Kettner Boulevard @ Laurel Street		
69.		Kettner Boulevard @ Grape Street		
70.		Kettner Boulevard @ Hawthorn Street		
71.		Kettner Boulevard @ Ash Street		
72.		Harbor Drive @ Market Street		
73.		Harbor Drive @ Front Street		
74.		Harbor Drive @ 1st Avenue		
75.		Harbor Drive @ 5th Avenue		
76.		Harbor Drive @ 8th Avenue		
77.		Harbor Drive @ Crosby Street		

Corridor _____ **Intersection**

78. Harbor Drive @ Sampson Street
79. Harbor Drive @ 28th Street
80. Harbor Drive @ 32nd Street
81. Imperial Avenue @ 12th Street
82. Imperial Avenue @ 60th Street
83. Imperial Avenue @ 62nd Street
84. Imperial Avenue @ 63rd Street
85. Imperial Avenue @ 65th Street
86. Imperial Avenue @ 69th Street
87. Imperial Avenue @ Merlin Street
88. Pacific Highway @ Ash Street
89. Pacific Highway @ Broadway
90. Pacific Highway @ Cedar Street
91. Pacific Highway @ Grape Street
92. Pacific Highway @ Hawthorn Street
93. Pacific Highway @ Sassafras Street
94. Pacific Highway @ Laurel Street
95. Pacific Highway @ Washington Street
96. Pacific Highway @ Rosecrans
97. Washington Street @ Hancock Street
98. Rosecrans @ Taylor Street
99. Sorrento Valley Boulevard @ Sorrento Valley Road
100. Hazard Center Drive @ Hazard Driveway West
101. Palm Avenue @ Hollister Street
102. Palm Avenue @ Harris Avenue
103. East San Ysidro Boulevard @ Camino De La Plaza
104. East San Ysidro Boulevard @ I-5/Jack in the Box Driveway
105. College Avenue @ El Cajon Boulevard
106. College Avenue @ Montezuma Road
107. Genesee Avenue @ North Torrey Pines
108. Governor Drive @ Genesee Avenue
109. La Jolla Village Drive @ Genesee Avenue
110. Mira Mesa Boulevard @ Black Mountain Road
111. Mira Mesa Boulevard @ Scranton Road
112. Scranton Road @ Morehouse Drive
113. Miramar Road @ Kearny Villa Road
114. Park Boulevard @ El Cajon Boulevard
115. Park Boulevard @ University Avenue