Finance & Administration Committee

Action Item III-A

March 10, 2011

Traction Power DC Cable
TITLE:

Traction Power D.C. Cable

PURPOSE:

Obtain Board approval to: 1) Initiate and award multiple, competitive material procurement contracts to purchase traction power cable, accessories and equipment. 2) Initiate and award a competitive, multi-year contract for cable installation. 3) Authorize three (3) new capitaly funded positions to provide project management, engineering, inspection and field support.

DESCRIPTION:

This program will install traction power cables to replace 30+ year old cables which are beyond their useful life and install additional cables to maintain a balanced traction power system. These actions are needed in part, to prevent intermittent ATC track circuit problems identified in the NTSB recommendations. This multi-year program has produced positive outcomes such as a reduction in cable fires, reduction of loss-of-shunt indications and reduction of maintenance calls for traction power problems. These improvements increase rail transportation safety and on-time performance, and are required to support 8 car train operations.

Each contract will have a performance period of one year base with four (4) one year options. Exercise of options will be subject to Board approval of funding availability for each fiscal year.

FUNDING IMPACT:

<table>
<thead>
<tr>
<th>Capital Improvement Program</th>
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<tbody>
<tr>
<td>Project:</td>
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<tr>
<td>CIP 139 - NTSB Recommendations</td>
</tr>
<tr>
<td>Senior Project Manager:</td>
</tr>
<tr>
<td>Steven Yang</td>
</tr>
<tr>
<td>Project Department/Office:</td>
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<tr>
<td>TIES/CENI/IRPG</td>
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<tr>
<td>Budget:</td>
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<td></td>
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<tr>
<td>This Action:</td>
</tr>
<tr>
<td>Prior Approval:</td>
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<tr>
<td>Remaining Budget:</td>
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<tr>
<td>Remarks:</td>
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<tr>
<td>Operating Budget Impact:</td>
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<tr>
<td>Additional Capital Positions:</td>
</tr>
</tbody>
</table>

**RECOMMENDATION:**

Board authorization for the following, contingent upon the availability of funding:

1. Initiate and award multiple, competitive material procurement contracts to purchase traction power cable, accessories and equipment.

2. Initiate and award a competitive, multi-year contract for cable installation.

3. Authorize three (3) new capitally funded positions to provide project management, engineering, inspection services and field support. These additional positions will increase the currently approved amount of positions from 11,089 to 11,092.
Traction Power Cable Replacement Program

Finance and Administration Committee

March 10, 2011
Obtain Board approval to:

- Initiate and award multiple, competitive material procurement contracts to purchase traction power cable, accessories and equipment
- Initiate and award a competitive, multi-year contract for cable installation
- Authorize three (3) new capitalilly funded positions to provide project management, engineering, inspection services and field support
Systematic replacement of traction power cable began in FY2000 and continues to 2023

- Replaces 30 plus year old cable that is deteriorating or beyond its useful life

- Addresses NTSB recommendations
• Existing cable contract
  – Previously awarded to Draka Cableteq, USA February 2008 for 5 years
  – Two years remaining on this material supply contract
  – An additional cable contract may be required based on findings from the NTSB recommended Negative Return Study.

• Existing cable installation contract
  – JOC3 installation contract expires June 30, 2011
  – New contract required to continue cable installation/replacement

• Additional contracts required for cable installation materials (lugs, clamps, channel, brackets, tools, etc.)
Benefits

- Increases safety by improving ATC track circuit reliability
- Increases rail reliability, improves on-time performance by reducing maintenance problems such as cable fires
- Required to support 8-car train operation
- Addresses NTSB recommendations (Refer to Appendix B)
Recommendation

Board authorization for the following, contingent upon the availability of funding:

- Initiate and award multiple, competitive material procurement contracts to purchase traction power cable, accessories and equipment

- Initiate and award a competitive, multi-year contract for cable installation

- Authorize three (3) new capitaly funded positions to provide project management, engineering, inspection services and field support
## Appendix A - Budget

<table>
<thead>
<tr>
<th>Project:</th>
<th>CIP 139 - NTSB Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Program Manager:</td>
<td>Steven Yang</td>
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<tr>
<td>Project Department/Office:</td>
<td>TIES/CENI/IRPG</td>
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<tr>
<td>Budget:</td>
<td>Proposed FY12</td>
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<tr>
<td></td>
<td>$74,959,000</td>
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<td>$6,980,000</td>
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<td>Remaining Budget:</td>
<td>$67,979,000</td>
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<td>Remarks:</td>
<td>Project CIP139_P6 (Traction Power Cable) has a proposed <strong>$10.426M</strong> budget in FY12 and <strong>$41.694M</strong> budget in FY13-16. The proposed NTSB recommendations funding is subject to Board approval.</td>
</tr>
</tbody>
</table>
Appendix B - NTSB Recommendations

• Conduct a comprehensive safety analysis of the Metrorail automatic train control system to evaluate all foreseeable failures of this system that could result in a loss of train separation, and work with your train control equipment manufacturers to address in that analysis all potential failure modes that could cause a loss of train detection, including parasitic oscillation, cable faults and placement, and corrugated rail. (R-10-12)

• Examine track circuits within your system that may be susceptible to parasitic oscillation and spurious signals capable of exploiting unintended signal paths, and eliminate those adverse conditions that could affect the safe performance of your train control system. This work should be conducted in coordination with your signal and train control equipment manufacturer(s). (R-09-15 Urgent)
SUBJECT: ADDITIONAL CAPITAL POSITIONS FOR THE MANAGEMENT OF CAPITAL PROJECTS

RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, The Board of Directors annually approves the Operating and Capital budgets by department, expense category and project, and establishes the total number of positions for WMATA; and

WHEREAS, The Traction Power Cable Replacement Program (CIP139_P6) budget is embodied in Resolution #2010-32, the Approval of Capital Funding Agreement and Local Capital Funding Agreement on June 24, 2010; and

WHEREAS, The program will install traction power cables to replace 30+ year old cables which are beyond their useful life; now, therefore be it

RESOLVED, That the Board of Directors hereby approves an increase to the headcount for FY2012 from 11,089 to 11,092; and be it further

RESOLVED, That the Board of Directors authorizes the General Manager and Chief Executive Officer to create three new capital funded positions effective for FY2012, to be used to provide project management, engineering, inspection services and field support for the Traction Power Cable Replacement Program; and be it finally

RESOLVED, That this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

Carol B. O'Keefe
General Counsel