SUMMARY STATEMENT

ITEM NO.       PATCO-19-027
SUBJECT:      Sole/Single Source Vendors for Replacement Parts for PATCO – CY 2020

COMMITTEE:    Operations & Maintenance
COMMITTEE MEETING DATE:   November 12, 2019
BOARD ACTION DATE:   November 20, 2019

PROPOSAL: That the Board of Commissioners authorizes staff to enter into sole or single source procurement contracts for the purchase of materials from approved vendors set forth in Exhibit A to support PATCO’s critical operations.

Amount: See Attached Exhibit A

Period: Calendar Year 2020

PURPOSE: With the aging infrastructure, PATCO is requesting approval of sole source justification for replacement parts from original equipment manufacturers (OEMs). Staff has recognized an opportunity to improve procurement efficiencies, streamline work processes and reduce approval redundancies through an annual sole source justification of components and parts critical to PATCO’s operation. The items to be procured are indexed in the Exhibit A attachment. Based on a thorough review of these items, PATCO procurement has determined that there is only one provider for these particular parts and that they have negotiated the best possible pricing for these items. This approach is consistent with the Lean Government initiatives and philosophies to improve the effectiveness and efficiency of PATCO procurement functions and increase transparency.

BACKGROUND: Currently, with the aging infrastructure utilized at PATCO, much of the equipment being maintained and serviced comes from sole or single source vendors. These sole or single source vendors generally have proprietary control over the manufacture of parts, components for PATCO equipment. PATCO’s equipment is capital intensive, long-lived and if properly maintained, can operate safely for decades. However, particular rail rolling stock and equipment are manufactured by a relatively small number of industrial producers, often using proprietary designs to meet the particular performance requirements and physical environment of transit systems and
railroads. In general, most parts and equipment are not mass-produced, but manufactured to order or are only available from the original equipment manufacturer (OEM), or a successor company with proprietary rights to the original design. These OEM parts or components are needed to repair and maintain rolling stock and other equipment specifically designed by the OEM manufacturer, where available technical data does not assure that a part or component supplied by another vendor will adequately perform the same function it replaces.

Attached Exhibit A is the limited list of sole/single source vendors and the product list that can be ordered from each vendor at a not to exceed cost, subject to approval of 2020 Operating and Capital Budgets.

While Board approval is being requested to allow for sole/single source procurement on the attached list for purchases over one hundred thousand dollars ($100,000), there have been additional procedural checks and balances incorporated into the process. For these purchases, documentation shall be prepared by PATCO purchasing outlining the item being purchased, the cost of the purchase, and the total payment to be made by PATCO for goods provided. This document shall be reviewed and approved by PATCO General Manager.

All items purchased on a sole or single source basis are subject to a cost analysis to ensure the reasonableness of the prices quoted. In order to ensure efficient and continuous provisioning of PATCO’s maintenance operation, items are generally put into inventory and when issued are charged to operations or to an approved capital budget line item. We are seeking the Board’s authorization. This process follows similar sole/single source processes of like agencies, such as SEPTA and NJ Transit.

SUMMARY: Amount See Attached Exhibit A
Source of Funds: General Fund
Operating Budget: PATCO Operating Budget
Capital Project: Multiple Projects
Period: Calendar Year 2020
Master Plan Status: N/A
Other Fund Sources: N/A
Duration of Contract: N/A
Other Parties: N/A
RESOLUTION

RESOLVED: That the Board of Commissioners authorizes staff to enter into sole or single source procurement for the limited purpose of acquiring those specific items outlined in Exhibit A to support PATCO’s aging infrastructure and OEM needs and be it further

RESOLVED: That the Chair, Vice Chair and the President must approve and are hereby authorized to approve and execute all necessary agreements, contracts, or other documents on behalf of PATCO. If such agreements, contracts, or other documents have been approved by the Chair, Vice Chair and President and if thereafter either the Chair or Vice Chair is absent or unavailable, the remaining Officer may execute the said document(s) on behalf of PATCO. If both the Chair and Vice Chair are absent or unavailable, and if it is necessary to execute the said document(s) while they are absent or unavailable, then the President may execute such documents on behalf of PATCO.

SUMMARY:

- Amount: See Attached Exhibit A
- Source of Funds: General Fund
- Operating Budget: PATCO Operating Budget
- Capital Project: Multiple Projects
- Period: Calendar Year 2020
- Master Plan Status: N/A
- Other Fund Sources: N/A
- Duration of Contract: N/A
- Other Parties: N/A
<table>
<thead>
<tr>
<th>VENDOR NAME</th>
<th>PART TYPE</th>
<th>NOT TO EXCEED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alstom Transport</td>
<td>Alstom is the remanufacturer of our transit cars. As each car reaches the end of the two-year warranty, PATCO will be solely responsible for the maintenance of these cars. ATC and ATO circuit boards, propulsion switch gear equipment, propulsion drive control circuit boards, voltage sensors and current transducers are proprietary components, to which Alstom owns exclusive rights.</td>
<td>$700,000</td>
</tr>
</tbody>
</table>
| Cubic Transportation Systems | Cubic Transportation Systems is the current vendor/integrator of PATCO's Automated Fare Collection System. The fare collection gates and ticket vending machines (TVMs) and ticket office terminals were manufactured by Cubic with the majority of the parts unique to these types of devices. The TVM and gate parts are modular and in-house staff performs limited bench repairs. Most modules are sent to Cubic (the manufacturer) for repair. The repair price is dependent on the severity of the issue and submitted to PATCO for approval before repairs commence. Some of the major components submitted for repair are:  
- Motor Gear Assembly (fare gate)  
- Tri-Reader Contactless Card Reader (all devices)  
- Single Board Computer (mother board for gate and TVM)  
- Coin Acceptor (TVM)  
- Bill Handling Unit (TVM)  
- Ticket Transport (fare gate)  
If a part cannot be repaired, a replacement part must then be ordered from Cubic. | $225,000           |
| Helwig Carbon Products   | DC motors are very sensitive to the grade of brush used. The only way to determine if a particular manufacturer and grade are acceptable is by conducting performance testing over a long period of time. PATCO has tested carbon brushes and found that Helwig Carbon brushes performed better than others. At this time we have no other tested/approved motor brushes. | $120,000           |
| WABTEC Global Services   | WABTEC Global Services is the successor to General Electric Transit Systems Business Division, the OEM of the car’s motor and gearbox parts. The motors and gearboxes were made in small numbers, so there are no other sources for this material. Included are motor-to-gearbox resilient mounts, couplings and motor filter housings. | $350,000           |
**EXHIBIT A**
**SOLE/SINGLE SOURCE VENDORS FOR PATCO - CY2020**

<table>
<thead>
<tr>
<th>VENDOR NAME</th>
<th>PART TYPE</th>
<th>NOT TO EXCEED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>WABTEC</td>
<td>WABTEC is the OEM supplier for all of the friction and blended braking equipment on the PATCO transit cars. As is common in the transit industry, there is no interchangeability among manufacturers of brake equipment. Due to limited market for this material and the potential safety liabilities, there are no alternate producers of these components. WABTEC supplies all the rebuild kits for air brake valves, cylinders and compressors. PATCO does the rebuilding in its shop.</td>
<td>$450,000</td>
</tr>
<tr>
<td>Quester Tangent</td>
<td>Quester Tangent is the sole manufacturer for replacement components for the onboard Monitoring &amp; Diagnostic system. No other manufacturers can produce parts compatible with Quester Tangent’s system.</td>
<td>$150,000</td>
</tr>
</tbody>
</table>
MEMORANDUM: PURCHASES GREATER THAN $25,000
PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
James White, Chief Financial Officer
John T. Hanson, CEO-DIPPA/President-PATCO

FROM: John E. Barrett, Division Director/Project Manager

SUBJECT: SOLE SOURCE APPROVAL - Alstom Transport

PURCHASE REQUISITION:

DATE: Wednesday, October 02, 2019

Background:
Alstom is the remanufacturer of our transit cars.

Justification for Proprietary/Sole Source:
The propulsion, ATO and other control systems were made in small numbers, so there are no off-the-shelf solutions available. Included are ATC & ATO circuit boards, propulsion switch gear equipment, propulsion drive control circuit boards, voltage sensors and current transducers. These are proprietary components which ALSTOM owns exclusive rights.

Cost:
$700,000

John E. Barrett, Division Director
John Rink, GM-PATCO
James White, CFO
John T. Hanson, CEO-DIPPA/President-PATCO
MEMORANDUM: PURCHASES GREATER THAN $25,000

PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
    James White, Chief Financial Officer
    John T. Hanson, CEO-DRPA/President-PATCO

FROM: Kathleen Imperatore, Division Director/Project Manager

SUBJECT: SOLE SOURCE APPROVAL - Cubic Transportation Services

PURCHASE REQUISITION: Various

DATE: Monday, October 07, 2019

Background:

Cubic Transportation Systems is the current vendor/integrator for PATCO's Automated Fare Collection System. The fare collection gates, vending machines and ticket office terminals were manufactured by Cubic with the parts unique and proprietary to Cubic.

Justification for Proprietary/Sole Source:

The vending machines and gates are made up of modular components. In-house staff perform limited repairs on the devices. Modules are sent to Cubic (the manufacturer) for repair. The repair price is dependent on the severity of the issue and submitted to PATCO for approval before the repairs commence. The modules submitted for repair: gate Motor Gear Assembly; Tr-Reader contactless card reader; Single Board Computer; Coin Acceptors; Bill Handling Units and gate Ticket Transport modules. At time, if the part is found to be non-repairable a replacement part will be ordered.

Cost:

$225,000-2020

Kathleen Imperatore, Division Director

John Rink, GM-PATCO

James White, CFO

John T. Hanson, CEO-DRPA/President-PATCO
MEMORANDUM: PURCHASES GREATER THAN $25,000

PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
    James White, Chief Financial Officer
    John T. Hanson, CEO DRPA/President-PATCO

FROM: John E. Barrett, Division Director/Project Manager
      Equipment

SUBJECT: SOLE SOURCE APPROVAL - Helwig Carbon Products

PURCHASE REQUISITION:

DATE: Wednesday, October 02, 2019

Background:

Purchase rolling stock inventory of carbon brushes for DC motors for PATCO operations.

Justification for Proprietary/Sole Source:

DC motors are very sensitive to the grade of brush used. The only way to determine if a particular manufacturer and grade are acceptable is by conducting performance testing over a long period of time. We have tested other brushes and they did not perform as well as the Helwig products. At this time we have no other tested/approved motor brushes. Therefore, we are requesting sole source approval to continue purchasing Helwig Carbon brushes.

Cost:

$120,000

John E. Barrett, Division Director
John Rink, GM-PATCO
James White, CFO
John T. Hanson, CEO DRPA/President-PATCO
MEMORANDUM: PURCHASES GREATER THAN $25,000

PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
    James White, Chief Financial Officer
    John T. Hansen, CEO-DRPA/President-PATCO

FROM: John E. Barrett, Division Director/Project Manager

SUBJECT: SOLE SOURCE APPROVAL

PURCHASE REQUISITION:

DATE: Wednesday, October 30, 2019

Background:

WARTEC Global Services is the successor to General Electric Transit Systems Business Division the OEM of the car's motor and gearbox parts.

Justification for Proprietary/Single Source:

The motors and gearboxes were made in small numbers, so there are no other sources for this material. Included are internal gearbox components, motor-to-gearbox resilient mounts, couplings and motor filter housings.

Cost:

$350,000

John E. Barrett, Division Director
John Rink, GM-PATCO
James White, CFO
John T. Hansen, CEO-DRPA/President-PATCO
MEMORANDUM: PURCHASES GREATER THAN $25,000
PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
    James White, CFO
    John T. Hansen, CEO-DRPA/President-PATCO

FROM: John E. Barrett, Division Director/Project Manager: Equipment

SUBJECT: SOLE SOURCE APPROVAL - WABTEC
PURCHASE REQUISITION: [Redacted]

DATE: Wednesday, October 02, 2019

Background:
WABTEC is the OEM supplier for all of the friction and blended braking equipment on the PATCO transit cars. PATCO purchases rebuild kits for air brake valves, cylinders and air compressors.

Justification for Proprietary/sole Source:
There is no interchangeability of brake parts among manufacturers of brake equipment. Due to the limited market for this material and the potential safety liabilities, there are no alternate producers of these components.

$450,000

John E. Barrett, Division Director
John Rink, GM-PATCO
James White, CFO
John T. Hansen, CEO-DRPA/President-PATCO
MEMORANDUM: PURCHASES GREATER THAN $25,000

PORT AUTHORITY TRANSIT CORPORATION

TO: John Rink, GM-PATCO
James White, Chief Financial Officer
John T. Hanson, CEO-DRPA/President-PATCO

FROM: John E. Barrett, Division Director/Project Manager

SUBJECT: SOLE SOURCE APPROVAL - Quester Tangent

PURCHASE REQUISITION

DATE: Monday, October 28, 2019

Background:
Quester Tangent is the designer of the onboard Monitoring & Diagnostic system on the newly refurbished traincars.

Justification for Proprietary/Sole Source:
Quester Tangent is the sole manufacturer for replacement components for the onboard Monitoring & Diagnostic system. There are no other manufacturers who can produce compatible parts to work with Quester Tangent's system.

The only alternate vendor who can provide these components is Alstom Transport. Alstom Transport is the system integrator of the refurbished trains, and while they are unable to manufacture these components, they can resell. We have sent RFQ's to both Alstom and the OEM and found that Alstom's pricing is astronomically high, typically 80% or more mark-up. Alstom also takes exceptionally long to provide quotes that make an already lengthy process even longer.

Cost:

$150,000

John E. Barrett, Division Director

John Rink, GM-PATCO

James White, CFO

John T. Hanson, CEO-DRPA/President-PATCO