
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

TRANSMITTAL DATE: September 22, 2015

MEETING DATE: September 25, 2015

ITEM 8

TO: Board of Directors

FROM: Arthur T. Leahy *ATL*

SUBJECT: Authorize Expenditure of Funds for a Non-Competitive, Locomotive Lease with Burlington Northern Santa Fe Railway Company and Identification of Various Related Change Orders and Contract Actions to current contracts for FY2015-16

Issue

Approval is required to increase the FY2015-16 Operating Budget to enable entering into a lease with Burlington Northern Santa Fe Railway Company (BNSF).

Recommendation

It is recommended that the Board increase the FY2015-16 Operating Budget by \$5.275 Million, and authorize the Chief Executive Officer to negotiate and execute a lease with BNSF in the amount of \$5.275 million for 40 General Electric (GE) AC4400CW Locomotives equipped with BNSF Positive Train Control (PTC) for a term of one year. This cost only includes the lease and transportation costs.

Alternatives

The Board may:

- 1) Decline to authorize the action and the increase in the Operating budget; or
- 2) Direct staff to develop further alternatives and return to the Board for further direction.

If the Board selects Alternative No. 1, the current operating plan would require that Metrolink service be reduced by approximately half, from 165 daily trains to 80 or 90 daily trains.

If the Board selects Alternative No. 2, such as leasing other locomotives, staff has determined that it is highly unlikely that any locomotives available for lease other than those from the BNSF will be equipped with PTC. Since the Board has authorized and prioritized PTC, and the Authority is at an advanced stage of the PTC deployment, additional funding and ~~substation-substantial~~ time would be needed to design, engineer and install PTC equipment.

Background

Metrolink, operates in a “push/pull” environment as do most other commuter railroads, which means that approximately half of its trips are made with the cab car in the lead position. On a weekly basis, including weekdays and weekends, Metrolink makes approximately 800 trips, 400 of which are made with the cab car in the lead. It has recently been determined that there is need, at least temporarily, to place a locomotive in the lead position on all Metrolink trips.

Procuring locomotives on short notice is a difficult task, in particular because Metrolink operates with PTC, which must be incorporated into any new vehicles, including locomotives. In addition, the logistics of arranging for delivery and any necessary modifications to locomotives are complex and significant. Nevertheless, staff has been working at a rapid pace to find the best solution to fill Metrolink’s needs.

Staff has contacted BNSF and determined that they are willing to lease locomotives to the Authority that are currently in Alliance, Nebraska and can be delivered relatively quickly. The locomotives that the BNSF will lease are the GE model AC4400CW which will come equipped with PTC, though they would need to be modified for Metrolink service. The intent is to have both the Metrolink locomotive, operating with head-end power (HEP) only, and the BNSF locomotive operating as the primary train power. These locomotive are big, heavy (420,000 lbs. on six axles) and powerful (4,400 horsepower with alternating current, or AC, traction motors). The history of reliability of this locomotive model is at industry standard (95% reliability), and their operation would likely improve on-time performance

BNSF’s locomotives have the unique combination of being located in a place that allows for prompt delivery and are already being equipped with PTC which is compatible with Metrolink’s system. No other type of locomotive could serve Metrolink’s immediate needs.

Under the Authority’s Board-approved Contract Administration and Procurement Policies and Procedures CON-19, the Board may authorize a non-competitive procurement for services when in the agency’s best interest. In addition, competition is not required when goods or services are available only from a single source or when using competitive procedures would be unavailing. Here, only the BNSF locomotives have the unique combination of being located in a manner that allows for prompt delivery, as well as being already equipped with PTC that is compatible with Metrolink’s system. No other type of locomotive could serve Metrolink’s immediate needs. Issuing a competitive solicitation for locomotives would be unavailing but given both the unique nature of the BNSF locomotives and the exigencies of time under these circumstances. For the above reasons, the actions outlined in this memorandum are consistent with CON-19. In addition, CON-18 allows for entering into contract without competitive bid in emergency conditions.

These PTC equipped locomotives are available from the BNSF at a competitive price in part due to a downturn in rail traffic.

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Because the BNSF locomotives are dissimilar to Metrolink's existing locomotive fleet in many respects, the Authority's current maintenance staff would need to be augmented and trained to maintain the leased locomotives. Additionally, spare parts would need to be procured and some modification would be required to make these locomotives compliant and compatible for Metrolink service. Cost estimates to lease, modify, operate, fuel, and maintain the leased locomotives and for FY2015-16 are reflected in Table 1 lines 1 through 9. For some aspects of locomotive use, waivers and/or approval from the Federal Railroad Administration (FRA) may be needed.

Approval of the locomotive lease will require an increase in the FY2015-16 Operating Budget in the amount of \$5.275 million and is the first step in a series of required future actions necessary to operate and maintain the locomotives and modify them for operation within the Authority territory with Positive Train Control (PTC). These future actions will be presented to the Board for approval and authorization at a later date, but are estimated to increase the FY2015-16 Operating Budget by as much as an additional ~~\$21~~13.85 million.

The BNSF locomotives will need to be modified to communicate with Metrolink's PTC System, and other modifications will need to be designed and incorporated to make them compliant and compatible for Metrolink PTC operation. Since the Authority is advanced in its PTC deployment and FRA approval process, staff would need to design modifications, perform tests, and submit considerable additional documentation to the FRA in order for these locomotives to operate under PTC. The cost to equip the BNSF locomotives with PTC and obtain FRA approval is included in the table, lines 11 through 17. A wide variety of timely contract actions will also be required to execute the lease. In general, these are listed in Table 1.

Table 1, below summarizes the above costs and outlines future additional costs associated with operating and maintaining the 40 locomotives and modifying for PTC operation in Authority-owned territory.

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Table 1: FY2015-16 Cost Estimates for BNSF Locomotives

BNSF LEASE COST Prior to PTC	FY 16 @ 9 months 325 Locomotive - months
BNSF LEASE COST @ \$500/DAY (\$15,000 mo. per Locomotive at 30 days)	\$4,875,000
SHIPPING (\$10,000), RETURN COSTS (\$10,000) per Locomotive	\$400,000
MAJOR COMPONENT PARTS MINUS MAIN ENGINE - \$20,000 per Locomotive	\$800,000
ADDITIONAL LABOR FOR MAINTENANCE \$360,000 PER MONTH (CONTRACT WORK FORCE OF 10)	\$2,740,000
ADDITIONAL FUEL @ \$2.20 GAL 2.8 GPMI X 4,600 MILES/ MONTH/ TOTAL = \$28,340 mo per Locomotive	\$9,210,500
Diesel Fuel Offset	(\$5,250,000), (\$7,010,500)
WHEEL TRUING - 6 AXLES PER LOCOMOTIVE /\$1500 PER AXLE \$9,000 per Locomotive	\$360,000
WORK MANAGEMENT SYSTEM MODIFICATION @ \$2,000 per Locomotive	\$80,000
POTENTIAL BRAKE, PEI, DOOR STOP MODIFICATIONS @ \$25,000 per Locomotive	\$1,000,000
TEMPORARY CMF KELLER AND EMF MODIFICATIONS TO ACCOMMODATE ADDITIONAL LOCOMOTIVES STORAGE, EQUIPMENT RENTAL TRAILERS AND GENERAL OVERHEAD, TEST TOOLS, MANUALS, TRAINING. \$50,000 / MONTH	\$450,000
SUBTOTAL NOT INCLUDING PTC	\$14,665,600 \$12,905,000
DESIGN, FRA DOCUMENTATION & REPORTS REVISED PTCSP	9 Months
SCRRA STAFF @ \$100,000 per Month	\$900,000
PTC CONSULTANTS @ \$180,000 per Month (Design, QA/QC, Documentation)	\$1,620,000
PTC CONSULTANTS @ \$150,000 per Month (Software/Hardware Modification)	\$1,350,000
MODIFY BNSF PTC EQUIPMENT FOR PTC (SLOT 10 TMC, ETC @ 30,000 37,500 per Locomotive) ASSUMES BNSF LOCOMOTIVES PTC EQUIPPED)	\$1,200,000
TEST TRAINS, 50 TEST RUNS @ \$5,000 PER RUN	\$250,000
ADDITIONAL SOFTWARE, HARDWARE CHARGES INCL. BACK OFFICE @ \$10,000 per Locomotive	\$400,000
Contingency	\$500,000
SUBTOTAL PTC	\$6,220,000 \$6,520,000
NET TOTAL MINUS POTENTIAL FUEL OFF SET COSTS	\$20,885,500 \$19,125,000

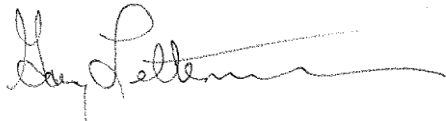
Next Steps

Staff will provide updates related to the BNSF lease agreement to the Board at the October 9, 2015 meeting and seek approval for the remaining contract actions and funding authority necessary to operate and maintain for PTC and other features. Following the October 9 update, staff will return on a quarterly basis, or more frequently if required, to keep the Board apprised of status.

Budget Impact

The budget for the items described above will come from an increase in the FY2015-16 Operating Budget in the amount of \$5.275 million and would be allocated based on budgeted train-miles formulae according to the all-share formula. Staff will continue to explore additional funding offset opportunities (i.e., diesel fuel savings) as a way to decrease the overall project budget. Staff will return to the Board to request additional funding to operate and maintain the fleet at a subsequent meeting.

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