



Electrification Infrastructure Design Build RFP

Board of Directors
February 5, 2015
Agenda Item 8



Context

- JPB approved Peninsula Corridor Electrification Corridor project (Jan 2015)
- Federal and State environmentally cleared (Dec 2009, Jan 2015)
- JPB approved contract methodology (Sept 2013)
 - – Design Build for electrification infrastructure
 - Evaluation criteria weighted to ensure highly experienced contractor
 - Best Value for vehicles (Electric Multiple Units)

RFP Preparation

- More than 800 comments from six prequalified firms and three funding partners
- Technical Review
 - Six prequalified firms
 - HSR, VTA, SFMTA
- On-going coordination with funding partners

3

RFP Key Components

- Electrification Scope / Adjustments
- Power Facilities Selection
- Maintenance Options
- Minimize Tree Removal
- Non-standard Workweek

4

Electrification Scope / Adjustments

- Scope
 - 50+ mile 25 kV system
 - Overhead Contact System (OCS)
 - Traction Power System
- Adjustments
 - Defer electrification south of Tamien Station
 - Defer electrification of storage tracks at 4th and King
 - Eliminate electrification of UP owned MT-1
 - Share foundations for guy wire pole

Power Facilities Selection

Facilities / Jurisdiction	Option Selection
Traction Power Substations (2) <ul style="list-style-type: none"> - TPS 1 (South San Francisco) - TPS 2 (San Jose) 	Option 4 TBD
Switching Station (1) <ul style="list-style-type: none"> - SS (Redwood City) 	TBD
Paralleling Stations (7) <ul style="list-style-type: none"> - PS 1 (San Francisco) - PS 2 (San Francisco) - PS 3 (Burlingame) - PS 4 (San Mateo) - PS 5 (Palo Alto) - PS 6 (Sunnyvale) - PS 7 (San Jose) 	Option 1 (no other option) Option 1 (no other option) TBD Option 3 Option 2 Option 2 TBD

Note: TBD is subject to further coordination with jurisdictions / agencies.

DB Maintenance Options

- Electrification will require specialized maintenance
- Maintenance options will provide information on DB capabilities and cost
- Two options
 - Overhead contact system
 - Signal and communication systems

7

Minimize Tree Removal

- Pole placement between tracks where space permits
- Double poles utilized from one side spanning both tracks where trees can be saved beyond opposite track
- Portal structures with feeder cable located closer to track minimizing tree removal and tree trimming

8

Non -standard Workweek

- Operational requirement for safe, efficient customer service prohibits work times during weekday peak periods
- Lower ridership during weekends allows for single track operations to support continuous work from Friday evening until Monday morning
- Thursday and Monday evenings until end of revenue service followed by work until start of service provide an additional full shift
- Limited work hours during non revenue hours results in 3-4 work hours
- A PLA is currently being negotiated with the labor unions that will be presented to the Board in the near future

Questions