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on Montana roadways

Montana Department of Transportation

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Michael T. Tooley, Director  
Steve Bullock, Governor

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FHWA  
MONTANA DIVISION

June 29, 2016

Kevin McLaury  
Montana Division Administrator  
Federal Highway Administration  
585 Shepard Way  
Helena, MT 59601

Subject: Finding of Public Interest  
State Furnished Electrical Equipment

Pursuant to 23 CFR 635.407, we are requesting your Finding of Public Interest for MDT's use of state furnished electrical equipment for traffic signal installations statewide.

**Background and Benefits**

- Some type of state furnished electrical equipment has been used by MDT since as early as 1981. There are significant benefits to MDT and the public with some electrical equipment being supplied by MDT. Equipment supplied by the state is procured through competitive procedures as required by MDT's Purchasing Services Section, and include Invitations for Bid, Request for Proposal, and Limited Solicitation.
- The primary reason for using state supplied electrical equipment is consistency and uniformity of the very specific devices necessary for traffic signal operation. The specific equipment that requires consistency at signalized intersections includes traffic signal control equipment, traffic signal poles and emergency vehicle preemption equipment.
  - Traffic signal operation can be coordinated through corridors and cities by deploying one brand of signal controller and control equipment. Software that communicates with on-street signal control equipment is specific to that equipment for advanced signal controller features. The traffic signal controllers and software must be the same manufacturer to effectively coordinate multiple intersections through a signalized corridor or network. Synchronization of the signal controllers to a common platform also allows signal operation and maintenance personnel throughout the state to be familiar with only one control equipment and software.
  - Uniformity in traffic signal poles allows MDT to use a modular pole design where pole pieces can attach to other pieces of different size. This flexibility provides easier field changes during construction and better maintenance replacement capabilities.
  - Uniform operation of emergency vehicle preemption accommodates existing emergency vehicle preempt emitters while also enabling the rejection of inappropriate preemption requests from pirate equipment.

- State supplied electrical equipment also allows quicker project construction. MDT has an inventory of the state furnished equipment for pick up and installation by contractors. This provides more expedient construction than the alternate process that requires contractors to submit for approval and wait for fabrication of materials. Fabrication and delivery of steel traffic signal poles has routinely been between three and six months, with some outlier deliveries taking even longer. Lead time for traffic signal control cabinets can be as long as six months.
- Another benefit to state furnished equipment is material cost savings. By making larger purchases of traffic signal poles and signal control equipment, MDT realizes better prices per piece than when equipment is ordered specific to individual projects. Orders for state supplied equipment have usually been made almost annually to have material for several projects available. Orders that are several times the size of a single project result in lower unit cost.

### Conclusion

We believe MDT should continue to provide some state furnished electrical equipment on projects. Any state furnished electrical devices are procured competitively by MDT and made available to contractors for installation. The benefits from synchronized signal control, quicker project delivery and construction and lower material costs are substantial. We feel an approval of this finding of public interest is justified for our state furnished electrical equipment process.

MDT continually evaluates our process of furnishing some electrical equipment. We will update our process within two years with a new request for finding of public interest with any potential changes to the process.

Roy Peterson, P.E.  
Traffic & Safety Engineer  
406-444-9252

FHWA Concurrence Chris Riley Date 07/21/16

Copies (pending FHWA approval):

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