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Sam Brownback, Governor

July 6, 2015

Mr. J. Michael Bowen, P.E.
Division Administrator
Federal Highway Administration
6111 SW 29th Street
Topeka, KS 66614

Attention Karen Gilbertson, ITS/Traffic Operations Engineer

Dear Mr. Bowen:

In support of the current pooled fund solicitation #1403, "Self de-icing LED Signals," the Kansas DOT is requesting the waiver of the non-Federal funding match for State Planning and Research Funds for use on the proposed project. Kansas DOT will serve as the lead agency, and the approximate level of funding required to complete the research is \$300,000. (This is in addition to \$100,000 that has been secured through the Transportation Research Board (TRB) NCHRP Highway IDEA Program.) The estimated duration of the project is 4 years and the estimated number of partners will be 6-7 including the lead agency.

This proposed project will develop multiple prototypes of a new type of self de-icing LED signals for highway signalized intersections and railroad signaling applications and validate them using the field tests. The innovative concept "Heated Lens Lighting Arrangement" was thoroughly tested in 2014. A non-provisional patent application (No. PCT/US14/53503) was filed on Aug 29, 2014.

The self de-icing LED signal light is aimed to solve a well-known problem of the existing LED signal light that does not generate sufficient heat in the forward direction towards the lens of the signal necessary to melt snow and ice. Snow and ice can easily accumulate on the lens within the signal hood in wintery conditions and block light to the drivers of vehicles or locomotive engineers. This can decrease the performance of signalized intersections and railroads and also result in collisions in inclement weather conditions. This is a problem in the snowy regions in North America for which a viable retrofit has not been developed or tested.

If you have any questions, please call me at 785-291-3847.

Sincerely,

A handwritten signature in blue ink that reads "Susan F. Barker". The signature is fluid and cursive, with a long horizontal stroke at the end.

Susan F. Barker, P.E.
Technology Transfer Engineer

c: Rod Montney