Air Resources Board

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Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

June 23, 2014

Mr. Robert M. Grimalia
Vice President
Safety, Security, Environment and CSO
Union Pacific Railroad
1400 Douglas Street, STOP 1180
Omaha, Nebraska 68179-1180

Dear Mr. Grimalia:

This letter is to inform you that the Air Resources Board (ARB) staff has completed its review of Union Pacific Railroad's (UP) submittal for Ultra Low Emitting Locomotive (ULEL) credit as provided for in the 1998 South Coast Locomotive Fleet Average Emissions Program (1998 Agreement).

The 1998 Agreement provides the opportunity to create ULEL credit as an incentive to a participating railroad to introduce the cleanest locomotives into the South Coast Air Basin. Since 2006, UP has been operating genset and battery-electric hybrid locomotives that are 50 to 75 percent cleaner than required. These advanced technology locomotives have provided significant emission reductions as well as local and regional public health benefits.

This review covered UP's submittal for calendar year 2013. The submittal included the following:

(1) UP's letter of certification: This letter is signed by the railroad and certifies that the information in this report is true, accurate, and complete.

(2) UP's summary information: This is information provided by the railroad regarding the methodology used to generate fleet average emission credits for the 1998 Agreement (Form F-S).

(3) UP's calculation for ULEL credit: This information includes individual locomotive days of operation and emission levels, as well as calculations and any necessary adjustments (Form F-D-1 through F-D-4).

Upon review, ARB staff determined that the submitted documents are complete and meet the reporting requirements set forth in the 1998 Agreement. Staff analyzed individual locomotive emission and activity levels to review the amount of ULEL credit supported by UP's submittal. For calendar year 2013, ARB staff determined that UP created a total of 3.0 grams per brake horsepower-hour (g/bhp-hr) of ULEL credit. ULEL credit can be used in the future to comply with the oxides of nitrogen fleet average of 5.5 g/bhp-hr.

ARB will make all of the information publicly available except for individual locomotive activity levels, which are business confidential according to California Government Code Section 6254.7. The activity data will be aggregated by tier and emission level.

Should you have any questions regarding staff's determination of UP's submittal for ULEL credit, please contact me at (916) 322-8267 or dito@arb.ca.gov, or Mr. Harold Holmes, Manager, Rail Strategies Section at (916) 324-8029 or hholmes@arb.ca.gov.

Sincerely,

Douglas Ito, Chief
Freight Transport Branch

cc: See next page.

cc: Mr. Robert Toy
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