

- a. Currently a source test company is onsite a minimum of one 10-hour day to perform RRA testing on the PM CEMS and two 10-hour days to perform an RCA testing. With the change, it is estimated that the source test company will need to be onsite for approximately two 10-hour days to conduct RRA testing and eight 10-hour days to conduct RCA testing.
 - b. The MATS Rule requires that the source testing firm be certified to complete the reference method tests. No source testing firms in Alaska are currently certified to perform the tests. As a result, GVEA must hire a company from out of state. The GVEA Healy Power Plant is a two-hour drive from the nearest major airport. GVEA must pay transportation and boarding costs for the source testing firm personnel while onsite. We estimate that this will increase the costs from \$1,000 to \$4,000 for fPM testing directly. GVEA's Healy Power Plants are located in the interior of Alaska which experiences extreme winter weather conditions with limited daylight and temperatures frequently dropping below -20°F, making the season to safely conduct stack testing relatively short when also scheduled around maintenance outages.
 - c. GVEA has had to spike the source tests with additional particulate matter (PM) to ensure the data from correlation testing will allow the data to correlate. GVEA has accomplished the spiking using fly ash collected by the baghouses in previous testing. GVEA has found it challenging to maintain a consistent spike level for a full test run while collecting 1 dscm considering variations in combustion fuel, operating conditions, and with the physical gradation of the ash used for spiking. GVEA believes that spiking for a three-hour period (or the necessary duration to collect a sample volume of 4 dscm) would be technically feasible, however would be even more challenging.
4. GVEA has concerns with the proposed revision to the mercury (Hg) emissions limit for existing low rank virgin coal coal-fired units. GVEA currently uses a Hg sorbent trap monitoring system (STMS) for one EGU. The sorbent trap analysis takes approximately 2 weeks to complete. As a result, a real-time response if the Hg levels were to increase is not possible. This circumstance has occurred occasionally due to the coal supply.

Currently, GVEA uses carbon injection to ensure compliance with the Hg limit on one EGU. The proposed Hg emission limit would require the addition of carbon injection to the other coal-fired EGU. GVEA has determined that the carbon injection system must be closely monitored to ensure that the EGU is not adversely affected by the injection of too much carbon. With higher activated carbon injection rates GVEA has experienced issues with a hard ash scale developing in the duct work that constricts airflow. GVEA may have to investigate alternative products, likely resulting in further cost increases.

GVEA is currently researching a mercury process monitoring system that will aid in ensuring compliance with the existing Hg limit. The system performs continuous emissions mercury monitoring using a modular design. It consists of 4 movable modules designed for 8-hour installation time. It allows for real time measurements of mercury