San Francisco City Attorney Dennis Herrera on Thursday asked California regulators to halt the deployment of Pacific Gas and Electric Co.'s controversial SmartMeters until an investigation of their accuracy is complete.

Herrera filed a petition with the California Public Utilities Commission (CPUC) to suspend PG&E's SmartMeter installation program. The utility has already installed about 5.9 million of the advanced meters, with 3.8 million more to come. Many customers have blamed soaring electricity bills on the meters.

"Common sense should argue against installing millions of defective SmartMeters until their problems are fixed and questions into their accuracy are fully resolved," Herrera said in a prepared statement.

"Unfortunately, when a company lacks common sense, it means regulators need to do their job to protect the public interest."

The commission earlier this year launched an investigation into the meters, which wirelessly transmit their data to the utility. But so far, the commission has resisted calls from legislators and consumer groups to halt the meters' deployment, saying that a pause would add to the SmartMeter program's cost.

A spokeswoman for the commission said Thursday that Herrera's request would be reviewed by an administrative law judge.

PG&E, based in San Francisco, has found problems with about 45,000 of the SmartMeters. But the company insists that most high monthly bills blamed on the meters were actually caused by rate increases and heat waves.

"We do not believe that a moratorium is necessary, and the CPUC has agreed with us on that," said company spokesman Jeff Smith.

E-mail David R. Baker at dbaker@sfchronicle.com.