ABB Totalflow and BLM Compliance

The BLM implemented new rulings 43CFR 3174 and 3175 regarding liquid and gas measurement effective January 17, 2017. A group of individuals will be formed that the BLM refers to as the PMT or Production Measurement Team. This group is to evaluate and approve equipment that may be added to the approved equipment list and publicly viewable at blm.gov. This group is not yet formed. As a result, no equipment is yet on the approved list nor is there a method to present existing data from flow computer manufacturers so they can ensure their equipment is on the actual approval list. Our understanding of the rulings is that flow computer sensors/transmitters and an approved software or flash in the flow computers must be on the approved list no later than January 17, 2019. A considerable amount of data must be compiled and presented to the PMTs well before the final date of January 17, 2019. A general overview of ABB Totalflow’s plans for obtaining BLM approval and ensuring that ABB Totalflow equipment is on the BLM approved list, are listed below.

1. Compile current test data on existing sensors and provide the data to the PMT group for review as soon as the group is formed. ABB Totalflow is currently in the process of assimilating existing sensor test data. Highest priority ranges will be those that have had the largest sales per product line. The XFC line has had 27 different DP/SP ranges. It is possible that not all of these will obtain approval. Details as to precisely what data will be required on existing sensors, is not defined in the BLM rulings. ABB Totalflow will supply an example of data for a single DP/SP range by the first of March 2017 to BLM officials for their feedback, to obtain their opinion if that data will be acceptable.
   a. All µFLOG4 and XFCG4 6200/6201EX units are expected to be approved. These will require a flash update. Since these units incorporate an “integrated sensor” that is not compatible with a “pre-G4 model”, all DP/SP ranges for these G4 products are expected to be approved.
   b. Totalflow is confident that sensor assemblies used in the XFC series of flow computers referred to as “XIMVs”, produced during 2009 and later with Serial numbers greater than “X 150300, will obtain BLM approval. The part number of these units includes a base part number followed by a “-XXX” suffix. The part number and Serial number are located on the front tag of the XIMV. The “-XXX” designates the DP/SP range. The following base numbers are included:
      i. 2101449-XXX
      ii. 2103442-XXX
      iii. 2104261-XXX
      iv. 2103367-XXX
      v. 2102817-XXX
   Older XIMVs may not get BLM approval. As more information is learned from the BLM and as the PMT group is formed and the review process is understood, it is possible that some of the older units may also be added to the approval list.

2. Flow computer software, often referred to as “flashes”, will require modification for all G4 platforms as well as the µFLOG5 and RMC.

3. Generation 1, 2 and 3 flow computer software/flashes will not be upgraded and submitted to the PMT group for approval. This includes 6600 series (G1), 6400 and 6700 series (G2), and XFC, XRC, µFLO and EX6200 (G3). However, ABB Totalflow provides an upgrade path in most instances. G2/G3 flow computers and RTUs can be upgraded with a main board replacement to comply with the software-flash requirements. XIMVs can be upgraded to units that will be approved if necessary, µFLOs (microFLOs), older than µFLOG5s will require the replacement of the IMV (integrated sensor and main board with new flash) for BLM compliance. EX6200/6201s will require replacement with the complete EXG46200/6201 series device with new compliant flash.
4. Upgrade “G4” flow computer software/flashes to comply with the CFR43 3175 ruling for the following devices:
   a. µFLOG4 with US units of measure
   b. XFC4 with US units of measure
   c. XRC4 with US units of measure
   d. EX4 6200 with US units of measure

5. Modify existing flashes in the µFLO5 flow computer and the RMC to include changes to comply with the CFR43 3175 ruling.

6. ABB Totalflow will implement additional requirements that are in the new BLM rulings related to software and calculations and recording as ABB Totalflow understands them. These will be tested as we understand the rulings prior to submitting to independent 3rd parties for verification.

7. Each flash as listed above in items 4 and 5 will be presented to a 3rd party for verification of compliance (per the CFR43 3175 ruling) and the report presented to the BLM PMT group once it is established. The details of this process are still waiting on additional information and flow computer calculation verification software to yet be supplied by the BLM.

8. All ABB MODBUS 266 XMV ranges will be on the approved list.

9. Details are still being worked out with our ABB partners related to data needed to support the ABB 267/269 XMVs. Customers will be updated on this item as we progress through this year and the process with the BLM team is more fully understood.

There are still uncertainties as to how the BLM will implement some portions of CFR43 3175. Particularly related to the testing data that will be required for placing existing sensors on the BLM approved list, and how flow computer software/flashes will actually be tested and approved. It is understood that the BLM will provide a yet to be determined “gold standard” calculation verification program for all vendors to use when testing the software/flashes. ABB Totalflow is committed to our customers and will have modified software/flashes for the products listed above as we understand the CFR43 3174 and 3175 requirements. We will work closely with 3rd party host systems during this process to ensure that they understand and implement any changes they may require due to our modification of the flashes, and that the software will be listed on the blm.gov website of approved software well in advance of January 2019.

ABB Totalflow has a history of supporting older devices. Our commitment is to ensure that current models of flow computers (sensors and software/flash) are on the approved BLM equipment list, and that earlier versions of flow computers have an upgrade path to meet the compliance rulings. G2 and G3 devices will require an electronic board upgrade and if original sensors are still in use, they will require replacement. However, the goal is to minimize the number of sensors requiring replacement when possible. Please refer back to item 1 b above for current expectation of XIMVs that will require replacement.

ABB Totalflow will have approved sensors and flashes, or upgrade paths for older models, on the BLM approved list and our goal is to make this process as painless as possible for all concerned.