PRODUCT ADVISORY LETTER (PAL)

PRODUCT ADVISORY LETTER NUMBER: CU46-15001

(Release of V4.03 firmware)

DATE: November 25, 2015

AFFECTED PRODUCT(S): UPLC/UPLC-II

AFFECTED MODULE(S): All UPLC Transceiver modules (CU20-XVRMN-001) with version 4.01 or lower (PPC) firmware.

SYMPTOM(s): There is one potentially critical failure mode only if I/O board hardware jumpers were changed after loading software settings that could affect existing protective relaying functionality as detailed in the release notes for version 4.03 firmware; otherwise this is a minor bug fix/feature upgrade. See release notes for version 4.03 firmware for a full list of all the bug symptoms.

RECOMMENDATION: This is not a mandatory upgrade. However Ametek recommends that all customers do this upgrade at their next regularly scheduled outage if they wish to avoid any possible issue when changing hardware jumpers on the I/O board as well as to add the new features and fix the other minor bugs. The full list of all the minor bug fix/features are in the release notes for version 4.03 firmware.

CYBER SECURITY NOTICE: No changes were made in this firmware that affect cyber security.

CORRECTIVE ACTION: This is an upgrade for the latest version of firmware, which is version 4.03. Customers with UPLC versions 2.00 to 4.01 (PPC) firmware can download the firmware update files from the ametekpower.com website and follow the directions in the release notes to upgrade themselves. Directions on downloading files were included in the email sent to all UPLC customers on record. Should you need additional details, please call our customer service at phone # 800-785-7274. Units which have version 1.xx (PPC) firmware or older hardware Transceiver boards CU20-XVRMN-001 rev. 4 will require sending the UPLC Transceiver modules (CU20-XVRMN-001) in for updating by Ametek. If needed, advance replacements can be supplied on a limited basis and the affected modules can be returned using the same packaging. Call Ametek at phone # 800-785-7274 (customer service) and reference this PAL to obtain an RMA number. This modification to the Transceiver board, if needed, is available at no charge and will not affect any applicable warranty.

TECHNICAL DETAILS: This is a firmware upgrade as detailed in this PAL and in the release notes. Upgrading one end prior to the other end should not present any problems other than those as outlined in the known firmware issues at the end of the release notes.
You can identify version numbers from the front panel keypad [Press Set, enter password (4050 default) then set again, enter "2" for configure, enter "4" for view revisions, Power PC ver.__ or from the web-browser interface (Admin page, software/firmware tab, PPC ver.__ and Transceiver board hardware revision_.).
For the one important bug fix potentially affecting protective relaying functionality:
The I/O board hardware jumper settings are read during power up by the UPLC processor and if they are changed after submitting software settings there is a bug that causes the processor to lose the TX/RX calibration levels as well as SOEs. This issue exists in version 3.07 to 4.01 firmware and is usually not a problem for most customers as the normal process is to set the hardware jumpers and then load software settings. As long as any software setting is made & submitted after the I/O board hardware jumpers are changed the issue will not occur.

The recommended workaround if you need to change an I/O board jumper after being in service and you do not want to upgrade the firmware for this bug is to take the following steps:

- Front keypad workaround method
    1. First take the system out of service.
    2. Press SET key and enter password (default = 4050) and then press SET again to accept password.
    3. Press "1" for Settings.
    4. Press "1" to change TX Frequency and change to any different frequency. Can just add 1 kHz to existing value.
    5. Press SET key again to store the new setting.
    6. Then go through the same process (steps 3-5) again and change the TX frequency back to its original value.
    7. Press "ESC" key twice to escape back to the main display.
    8. Put the system back into service.

- Web page workaround method
    1. First take the system out of service.
    2. After logging in, click on the SETTINGS button in left column of web page.
    3. Click on "Change Settings" button at bottom of general settings web page.
    4. Change "System ID1" by just adding a space at the end of the existing description.
    5. Click on the "Continue" button on the web page.
    6. Verify you see the red bar at the top of the web page saying "changes pending".
    7. Click on Submit tab all the way at the top right of the web page.
    8. Click "Submit Changes" button.
    9. Put the system back into service.

Either of these simple software setting change methods will prevent the I/O board hardware jumper change from causing the issue.