

2017 CiSCO CEMS User's Group

Analyzer, Heated Sample Line and PLC Replacements

Lessons Learned

Analyzer & Sample System Replacements

- Need to define what is staying and what is being replaced – are the items staying compatible and adequate to handle the new system. Be as concise as possible (HSL boots, PSB, new electrical required, . . .)
 - Is a plant visit by CiSCO required, expected or beneficial?
 - What drawings are available – whose system was it, have there been any modifications that need to be addressed?
 - Will the software be modified? How? Small changes or whole new version? Define expectations
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Analyzer & Sample System Replacements

- Define installation – who will install what? (HSL, analyzers, support rails, moving electrical, terminating lines)
 - How much downtime is expected?
 - What is the plant availability?
 - Safety requirements – are there special requirements for your site?
 - Tools and other items that need to be supplied?
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Analyzer & Sample System Replacements

- Are Monitoring Plan updates included?
 - Hard Copy Monitoring Plan?
 - QA/QC Document – will this be updated? Does one already exist? Can it be provided?
 - Will there be a new I/O list provided? New DAHS Specification?
 - Are new drawings being supplied?
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Analyzer & Sample System Replacements

- How will the O&M Manual be updated?
 - Will the analyzer ranges stay the same?
 - Will the Calibration gasses need to be changed?
 - Are all calibration gasses onsite for the new system?
 - Is the OIT still supported?
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Analyzer & Sample System Replacements

- Define number of personnel to be onsite and for how many days.
 - What assistance will plant provide?
 - Is there a plant person assigned to lead the project?
 - When can equipment be shipped prior to installation phase?
 - Maintenance of other equipment is essential (equipment that has not maintained and fails during installation is out of scope and will result in extra charges – make sure there are adequate spare parts or repair parts onsite).
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PLC and OIT Replacement

- GE PLCs – the Fanuc to the RX3i
 - Allen Bradley – SLC PLCs - limitations
 - Allen Bradley – CompactLogix and ControlLogix
 - OIT Panels – Allen Bradley, Automation Direct, GE, Maple
 - RealView as an option
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PLC and OIT Replacement

- DCS Communication

- Is it Serial? Will it need to stay that way?
 - CiSCO will propose an Ethernet solution if possible.
 - Need to make sure this communication is defined either in the proposal stage or VERY early in the project.
 - If DCS changes are needed, that is not in CiSCO's Scope.
 - Site DCS person is needed to be active in all phases of the project.
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Testing the System Changes

- CiSCO personnel, along with plant personnel, need to make sure that the new system is fully functional (calibrations run correctly, CGAs/Linearity checks if applicable, are functional and accurate, taking system out of service functions properly, communication with DCS is functioning and accurate)
 - For the remaining functions that can't be immediately tested – create a list and update CiSCO weekly for the first few months (startup, shutdown, limit alarms, etc.).
 - Signoff of daily field service reports from CiSCO technicians to acknowledge the status of the installation and identify any issues and delays that are happening.
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What's Next

- Questions and General Discussion

