**Appendix 9O – North Water Commissioning Check List**

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| --- | --- | --- | --- |
| Devices To Be Tested: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Region / Owner: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Operation: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Engineer Consultant: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Contractor: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Programmer / System Integrator: | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Test Date: DD/MM/YY |  | Location: |  |

SCADA Check List:

Initial tasks when **ALL** Devices were checked without issue; otherwise refer to numbered note.

| Item # | Description | Integrator | Operator |
| --- | --- | --- | --- |
| 1 a | eRIS Pre - check |  |  |
| 2 a | Trends Gather info |  |  |
| 3 | IO SERVER Update add processors to both servers |  |  |
| 4 | SCADA1 update |  |  |
| 2 b | Trends perform work |  |  |
| 5 | Events and History logging |  |  |
| 1 b | eRIS Perform Work |  |  |
| 6 | PLC Historian running |  |  |
| 7 | IO checked |  |  |
| 8 | Plant Manual operation checked |  |  |
| 9 | Setpoints Check |  |  |
| 10 | Check that all effected equipment works in auto |  |  |
| 11 | Alarming shut downs |  |  |
| 12 | Deploy application to all SCADA machines |  |  |
| 13 | Operations confirm they understand the current auto operation of the site |  |  |

*That by initiating the operator doesn't take responsibility for the functionality of the code but they are signing that they understand the changes that are being made and they accept them.*

Purpose: This document is to be filled out when PLC or HMI changes are being made but not commissioned the same day. In the event of a commissioning taking place it is up to the integrator to provide a suitable checklist that as a minimum contains all of the same information and checks and is to be witnessed and approved by a SCADA Gatekeeper.

\*Please note that items 1, 2, 7, 4, and 12 require that preparation work be completed before the site meeting and update is rolled out.

Instructions for use:

* *Each cell is to be initialled by the responsible party.*
* *Any cell that is shaded black doesn’t require an initial.*
* *This document is to be completed and E-mailed by the integrator to the responsible gatekeeper the next morning.*
* *If there are any issues with sign off the Project manager and SCADA gatekeeper are to be contacted immediately.*
* *Before work begins at site the integrator is to save a copy of the application and PLC code in case they need to be rolled back.*

Item #1: If there needs to be any changes made to the eRIS reports the appropriate Operations Support Co-ordinator is to be contacted and informed of the changes. The required changes are to be explained to the operator and they are to sign off that they understand that the eRIS reports are out of date until updated by the Operations Support Co-ordinator so they will have to use the appropriate ActiveFactory Trends until such time as the eRIS reports are updated.

Item #2: Operations to define before the integrator is scheduled to come to site, the integrator then comes to site and updates the trends, lastly operations to confirm they are satisfied. This includes both InTouch and Historian Client trends or only Active Factory trends on applications that don’t have InTouch trends.

Item #3: If the integrator is adding a new PLC they are to confirm that both IO servers are configured.

Item #4: Before the site meeting the integrator is to confirm that a SCADA Representative is available to update SCADA1 with any updated tags. When the integrator is ready they request that SCADA1 be updated. The person who does the update informs the integrator they are finished and the integrator demonstrates the ActiveFactory Trends are working.

Item #5: Review the history and see that both events and alarms were recorded.

Item #6: The integrator is to demonstrate that the PLC historian is running. Both the integrator and the operator are responsible to know which tags are deemed compliance and must be recorded before the site visit is booked.

Item #7: All new or altered IO must be confirmed from the device to the PLC data table.

Item #8: Each new or altered device is to be tested in plant manual mode to confirm operation.

Item #9: All setpoint entry screens are to be tested with the operator logged in so security levels are checked at the same time. All set points are to be explained to the approving operator.

Item #10: The auto code is to be demonstrated to the operator as functional and explained.

Item #11: All alarms that cause equipment to shut down have been demonstrated to do just that. The integrator is to provide a list of these alarms beforehand and operations is to validate the list before a site visit is scheduled. All dial out alarms are tested.

Item #12: Integrator to deploy the runtime application to all workstations and terminal servers. Once complete the operator is to verify the application # is the same on all of the machines on the workstation communication screen.

Item #13: Often during construction abnormal operating conditions occur during integration of new equipment. A brief description should be written on the back of the sheet describing any abnormal operating requirements and operations is to sign off that they both understand and agree to these conditions. If there aren’t any then written none and initial.

Notes:

| Note | Comment |
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