ControlIT AC 800F and S800 I/O
The new way for process operation in water treatment plant

ControlIT AC 800F and S800 I/O changes the ways for operators to operate the filtering process control. The Water Treatment Plant of Metropolitan Water Authority Bangkhen, Thailand was established in 1979. It’s processes have been controlled by Human with only manual operation. Now, ABB ControlIT is the next way for their control system.

There are separated 32 filter ponds that the operators had walked or ride a motorcycle to operate since 20 years ago. All sequence are manually controlled by human. And now, they intend to develop the filtration process from manual to be fully automatic operation, and of cause all sequence must be operated accordance the existing procedure. Our new ControlIT is the best solution. The complied technical specification with ABB brand name and competitive price suitable are the keys to win this jobs. With the excellence management and hard attempt of engineering team, this project has been fully completed the project requirement and fulfill contract obligation during 8 months project period. Ours new system can increased a capability of the existing filtration and backwashing process, to control and monitoring process operation, included with fully backup by local control system in case of new system failure. The typical reusable software is also the advantage for ABB to easier extend and implement to the next project in the future. Reliable system with easy for engineering, easy for operation, and easy for maintenance make smiles on the customer's face, and being proud for our team.
Success story information:

Customer: Metropolitan Water Authority, Thailand (MWA)
Supplier: ABB Limited, Thailand
Contract date: 3 April, 2001
Completion date: 27 November, 2001
Scope: Turn key Supply, erection, and commissioning Automation System for 32 filtering process with backwash system integration

System:
- ControlIT AC 800F: 3 Units
- ControlIT S800 I/O Type L: 33 Units
- DigiTool Engineering software v.6.1: 1 Unit
- DigiVis HSI software v.6.1: 1 Unit

Communication:
- I/O communication: Profibus DP with 6 Mbits/sec
- Control Network: Ethernet TCP/IP (DigiNet S)

I/O size: 2,720 I/O per system

Project team:
- Project manager: Mr. Chaiwoot S.
- Project co. & Sale pursuit: Mr. Witchan S.
- Design & Commissioning: Mr. Kitti T.

Challenge:
- Very old system without any updated drawing,
- Not same hardware and wiring for existing 32 filter local control panels (4 different models)
- To complete whole project within 8 months,
- Long shutdown for testing are not accepted,
- Fully local control backup is required,
- Cash flow management,