Automated Irrigation Control

Partner with M.E.T.



- System Control
- Visual Indication
- Process Status
- Historical Trending
- Alarm Conditions
- Process out of Compliance
- Process Marginal Compliance
- Preventative Maintenance
- Service Scheduling
- Data-Logging Into A Usable Format (Excel, etc.)

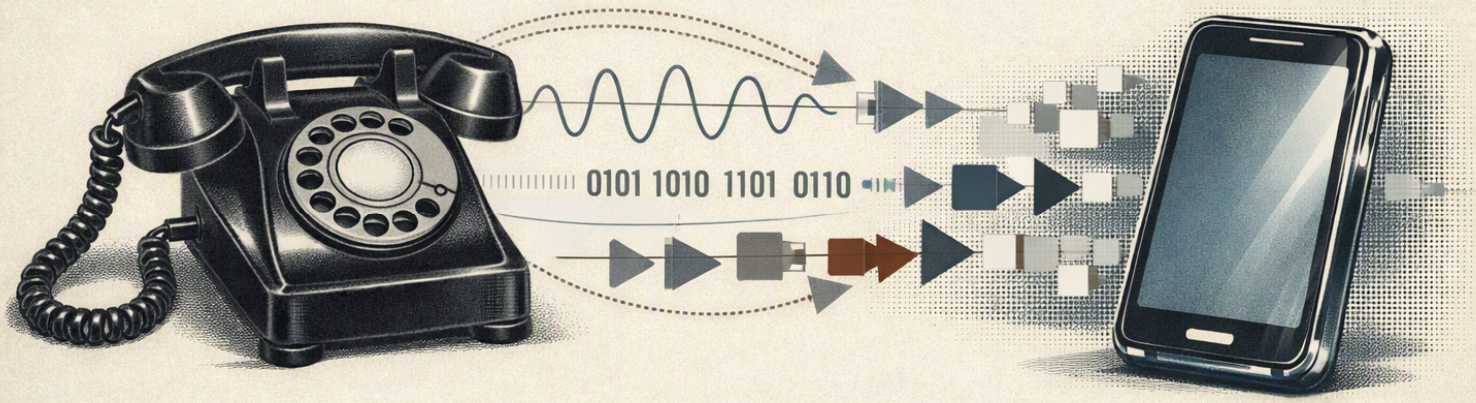
Presenter: Dennis Burgard / Pete Parsons / Joel Burgard

Representing: M.E.T. Automation & Controls

Service and Support



M.E.T. Responds









Automated Irrigation Control

Dennis Burgard, Owner M.E.T. Automation & Controls
Joel Burgard, Senior Programmer and PM M.E.T.
Pete Parsons, Marketing and Sales M.E.T.

















Where to Start?

- Helena Valley Irrigation Helena reservoir and distribution project.
  - WWC Engineering RFP
  - M.E.T. Controls & Automation proposal
  - Proposals reviewed
  - Project awarded

HVID
Helena Valley Irrigation District

WWC
ENGINEERING

M.E.T.
Automation & Controls
Keeping your process flowing in the right direction!

HVID started at their Helena reservoir intake

Aged infrastructure was replaced, gates automated, remote monitoring and control provided





Irrigation Districts are problem solvers





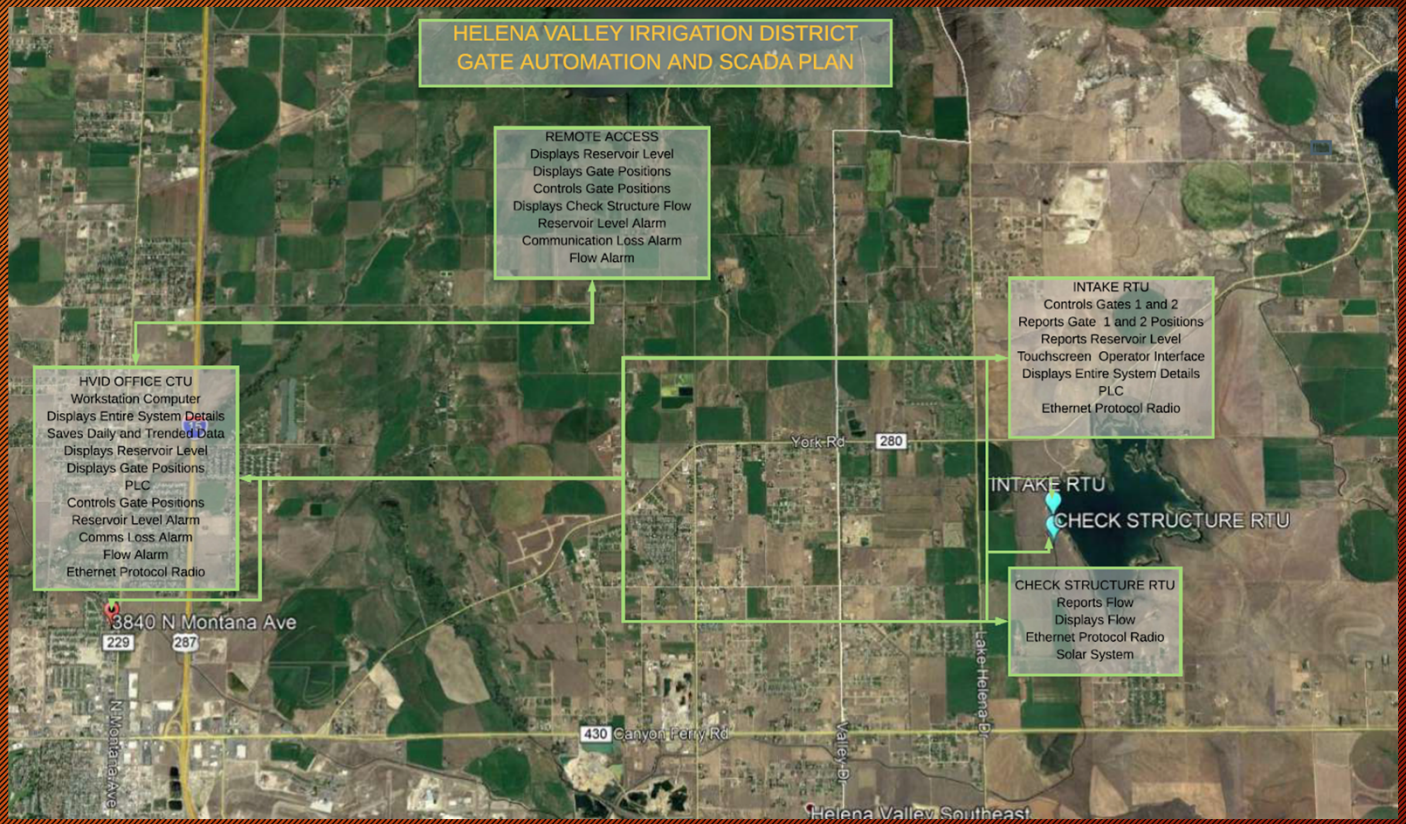




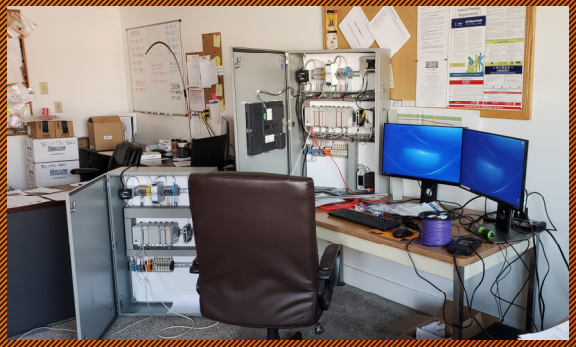


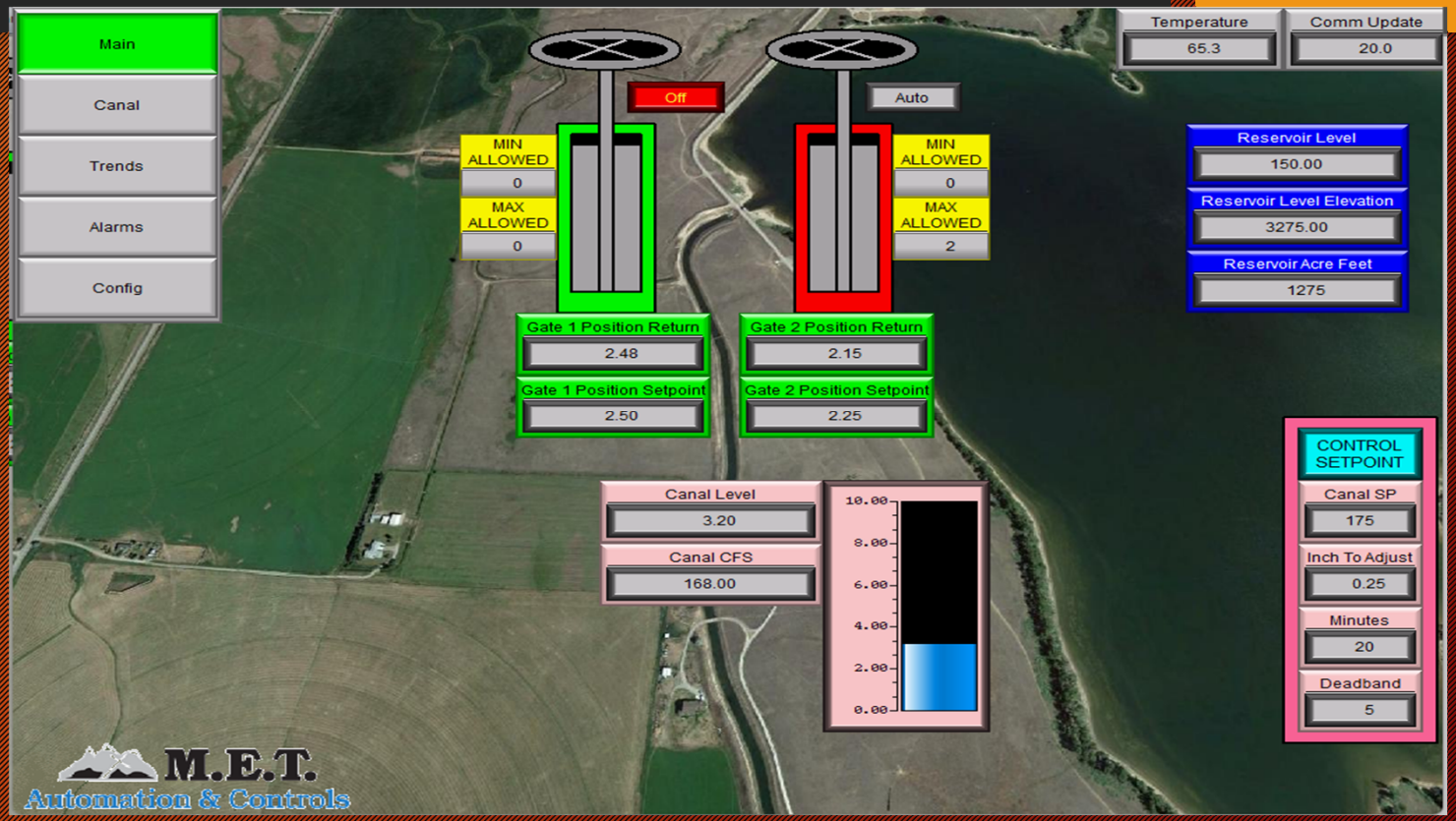

INTAKE RTU
HELENA VALLEY IRRIGATION DISTRICT

A SCADA plan was proposed for control

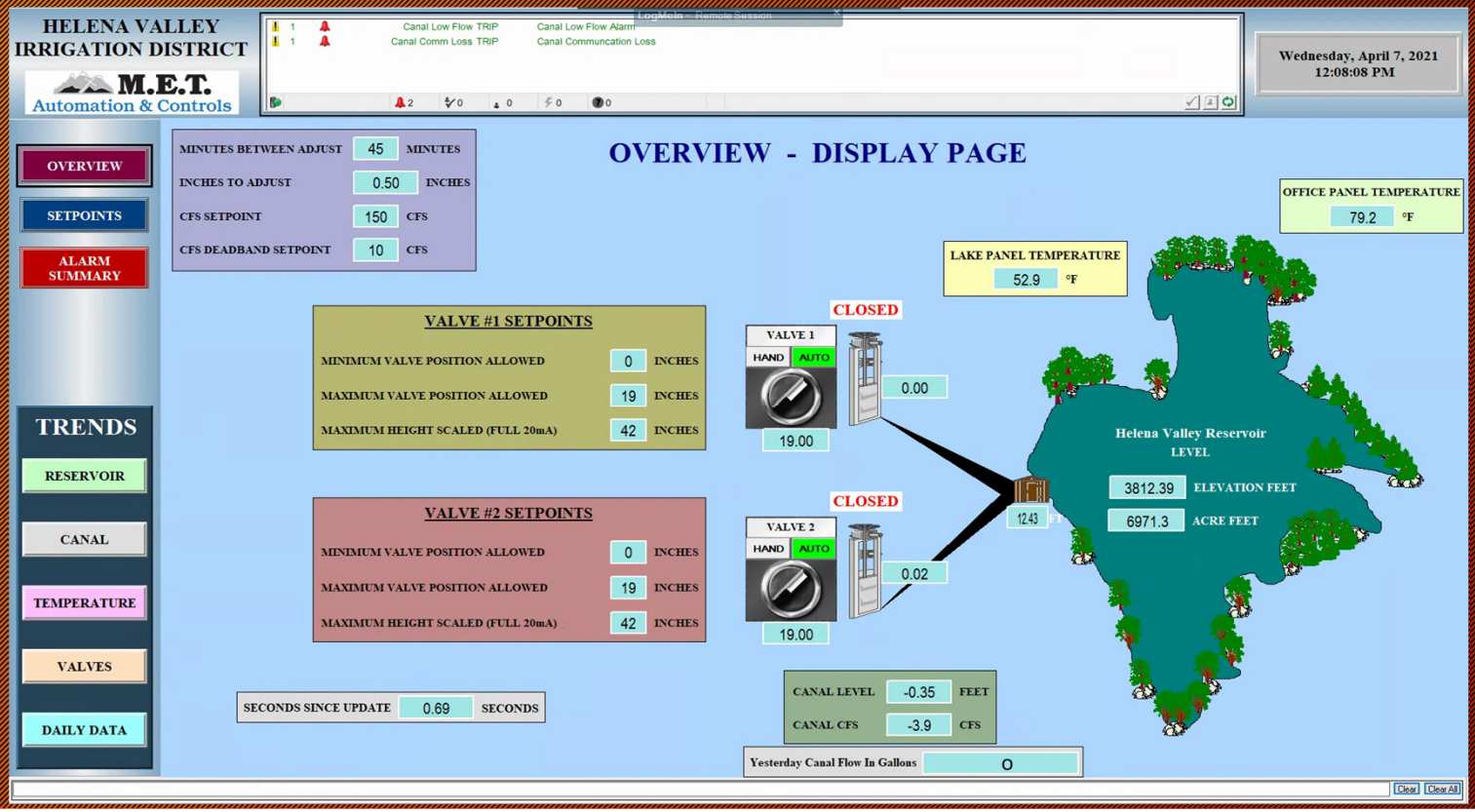


Remote monitoring and remote access were added

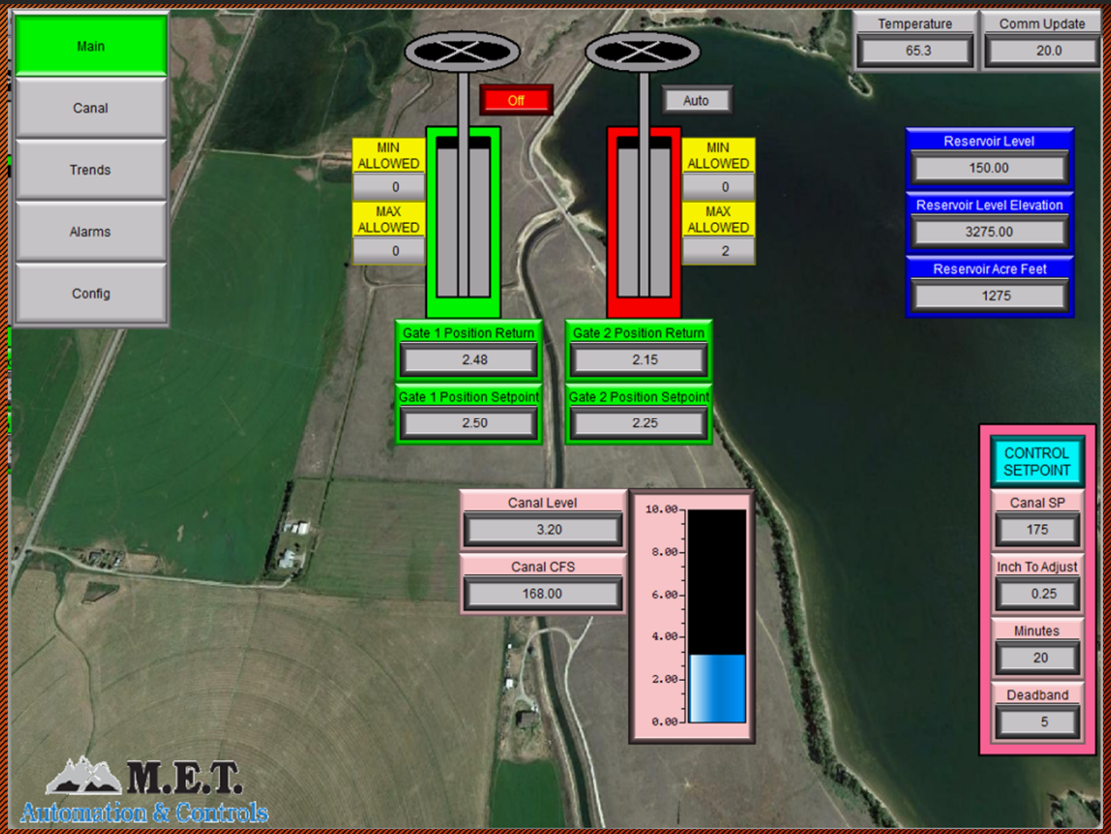




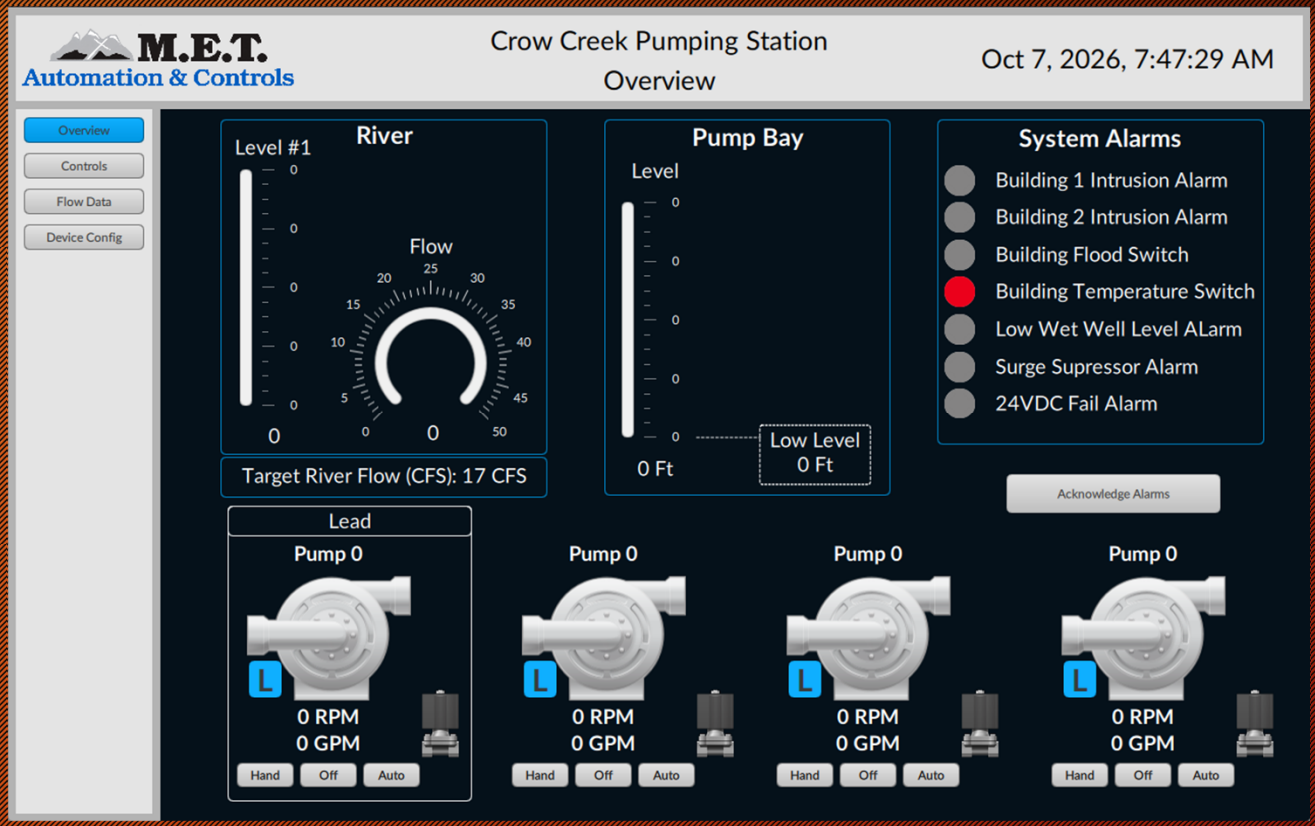
Value added: SCADA workstation automatically exports to EXCEL for easy report generation



The auto control of the intake allows the operator to input the desired flow, and the SCADA adjusts the gates to reach and maintain that flow



Flathead Indian Irrigation Project

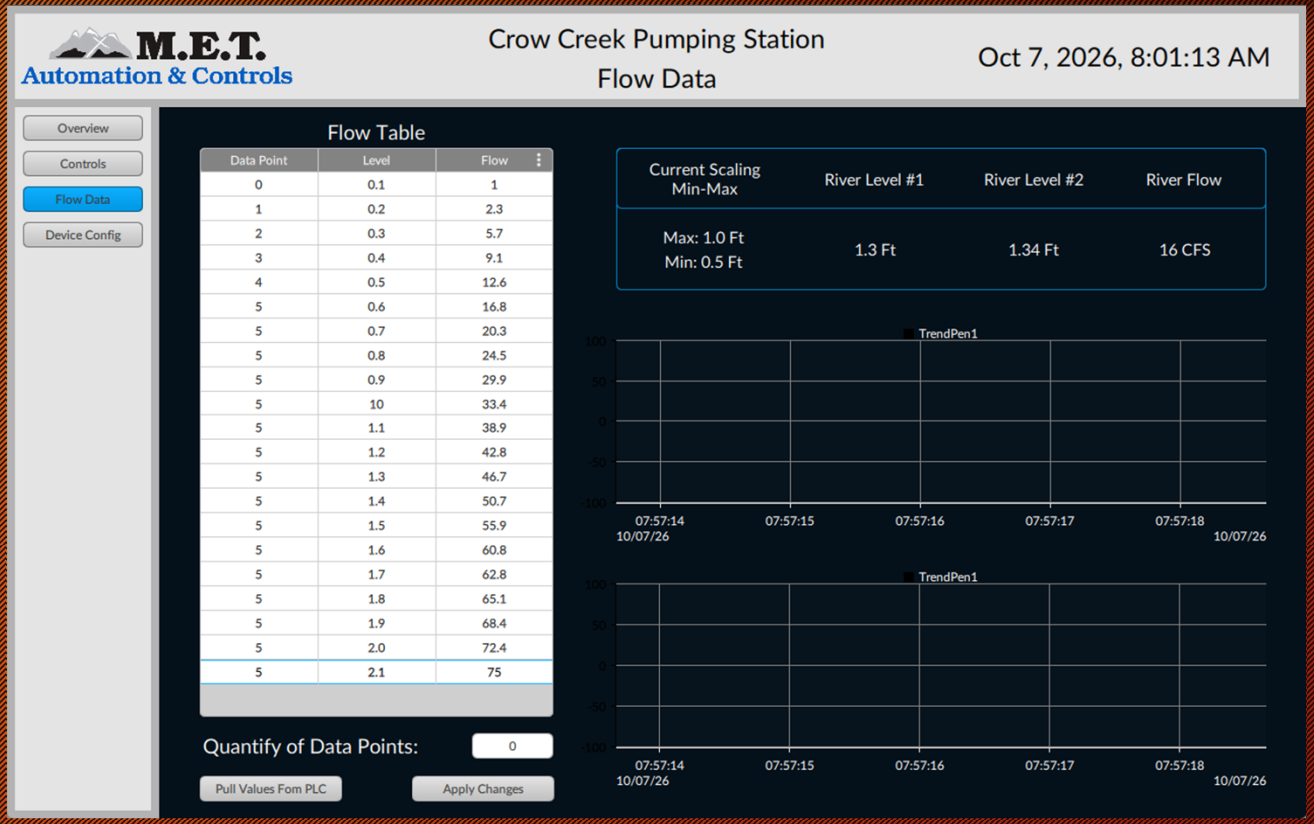


Started at the Beginning

- Established a standard for all locations
  - Hardware
  - Panels
  - Software
- Design proactively not reactively
- Plan for the future



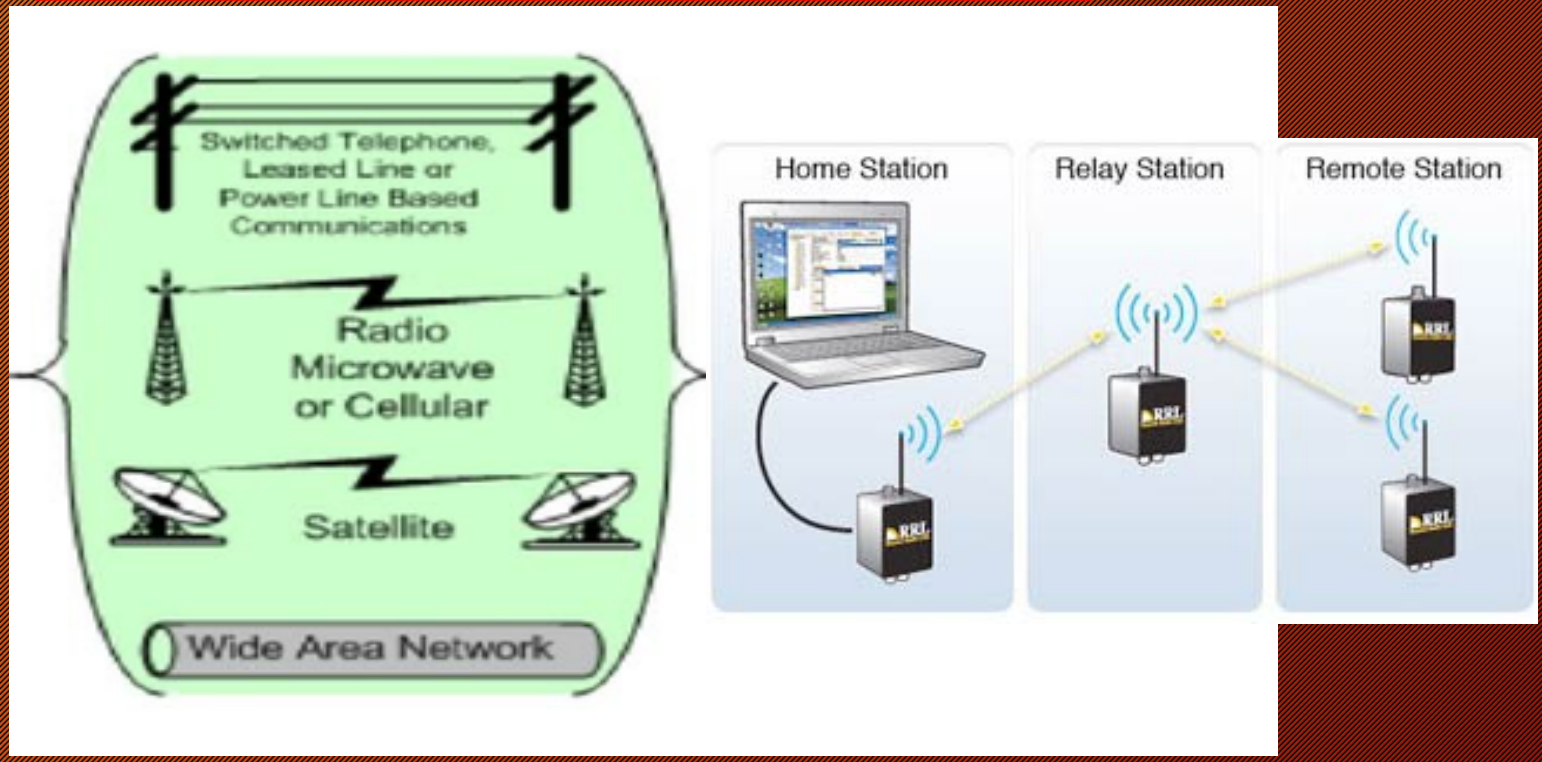
Solutions That Work For You



TELEMETRY: The method data is collected from remote equipment and transmitted to the SCADA

RADIO **MODEM** **FIBER OPTICS**

BUS **WIRE** **SATELITE**



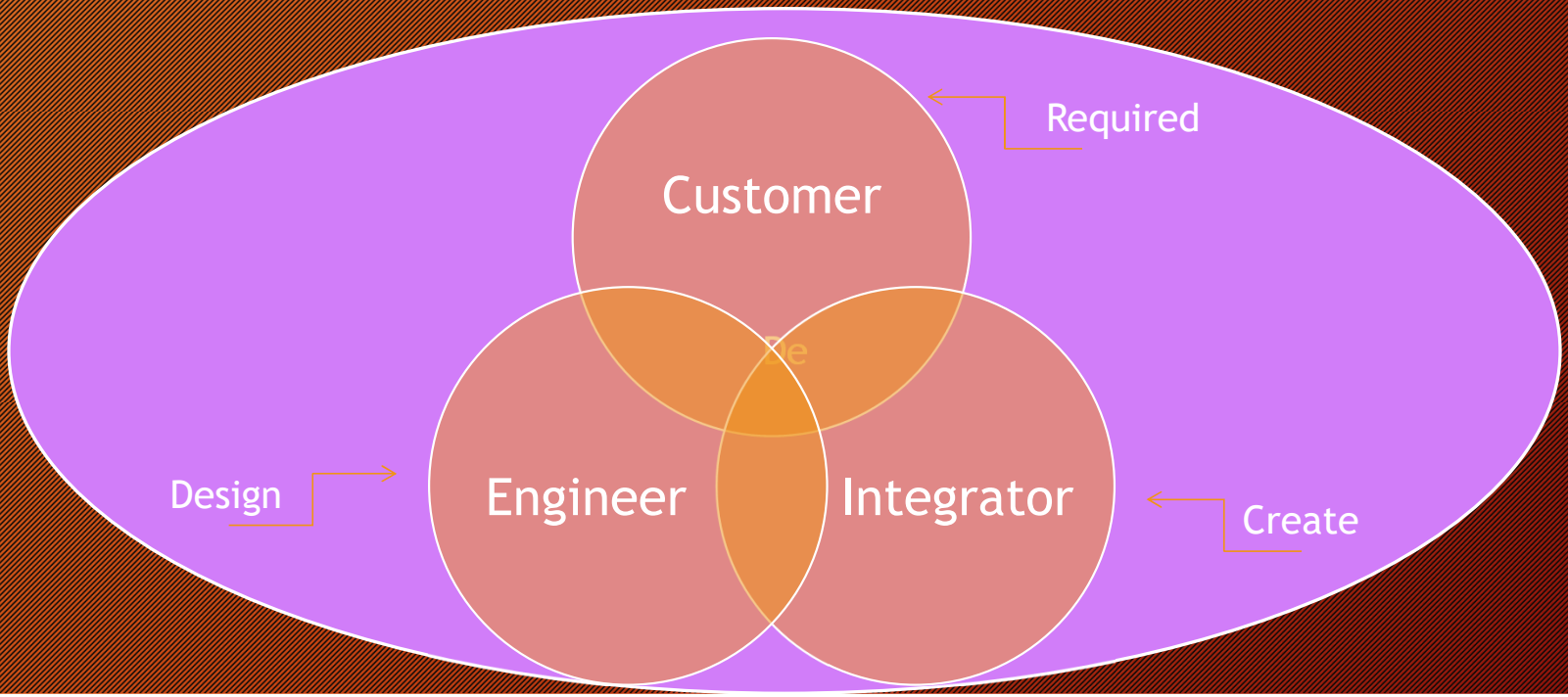
Things to look for in an integration partner.

1. More than just an integrator
    1. Field Instruments
    2. Onsite instrument installation/modifications
2. Local Support
    2. Montana based not just remote office in MT
3. Work with customer in order to create a system specific to each need.
    2. No copy/paste

How to make the good system into a great system?

Collaboration:

Customer: Input into what is desired
Engineer: Design considerations, and input to requirements
Integrator: Suggest ideas / Provide Abilities and Limitations



Don’t be Crushed in the SCADA World



Don’t be Crushed in the SCADA World





Let M.E.T. help you
Stay flexible



And survive the tightrope

SCADA

How to make your control system work for you

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