

RICHARDSON SUBSTATION DESIGN SOLUTIONS, LLC
ELECTRICAL POWER SUBSTATION STAFF SUPPORT COMPANY

John Richardson

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Experience



As built



Approval Drawings



Protection and
Control circuits



Experience with
micro-processor
relays



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equipment

EXPERIENCE

- 34 years of power substation control experience
- Prepared meeting(s) for major installations of high voltage equipment
- Conducted substation field research for projects
- Communications with other engineering sections
- Preliminary cost estimates

AS-BUILTS

- As-builts are a critical and time-consuming process to update drawings for the next engineering project.
- Initial design is approved, but test engineer makes field modifications.
- RSDS, LLC can reduce overhead cost of these drawings

APPROVAL DRAWINGS

- RSDS, LLC can review your approval drawings
- 161 or 69kV high voltage breakers
- 161kV Circuit switcher
- 161 or 69kV power transformer (Delta-Star, ABB, Hyundai)
- Siemens 23.9 or 13.8kV feeder breakers

PROTECTION AND CONTROL

Assist with design of control circuits

Control DC and AC

Trip and close circuits

Line and high side bus differential schemes

Transformer differential protection

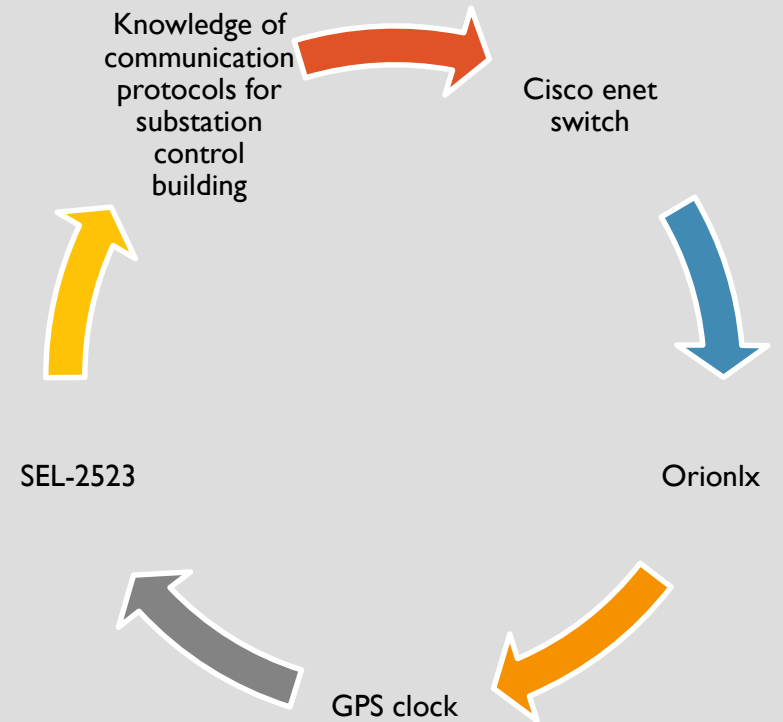
Low-side differential protection

A close-up, angled view of a blue printed circuit board (PCB) with intricate white and silver circuit traces. The board is the background for the left half of the slide. A white-bordered box is superimposed on the board, containing the text 'MICRO-PROCESSOR RELAYS'.

MICRO-PROCESSOR RELAYS

- Utilize smart relays to control power transformer, low-side and feeder breakers
- Experience with SEL-311L, 311C, 387, 421, 451 & 487B

COMMUNICATIONS EQUIPMENT





SOLUTION ASSESSMENT

- This a critical component when public or private utility incorporates
- Addition or removal on electrical power equipment in substation
- System planning and relay protection group develop scope of work
- RSDS, LLC goal is to listen and understand control scheme
- Review existing pertinent drawings that are applicable to new design
- Conduct field inspection for project and consult with client on
- Inception and completion date

CONTACT

- The goal of RSDS, LLC is to assist private and public utilities in the field of power substation engineering. RSDS, LLC goal is to be your technical client staff support company. For more information, please contact:
- RSDS, LLC
- 4154 Creek Trail Dr
- Whites Creek, Tenn 37189
- email: jrichardsonsds@outlook.com
- 615-585-8128