



VALD ENGINEERING · FIELD NOTES · No. 1

The Panel That Was Never Commissioned

How a dozen live analog points came to be documented on dead steel - and how the record was corrected before a crew walked to it.

THE SETUP

During migration engineering for a large municipal wastewater treatment plant, the issued wiring schedule for one control unit listed a dozen in-service analog points terminated at a remote I/O panel nearby. On paper, everything agreed: the control database bound those points to the panel, and the schedule repeated the database.

THE CONTRADICTION

Reconstructing the installed plant from primary evidence told a different story. The remote I/O panel had been staged years earlier for a tie-over that never happened. It was never commissioned. The bindings were software configuration overlaid on the old I/O - the field conductors never moved. Every dump of the control database ever taken repeated the same fiction, because a database can only tell you what it was told.

THE RESOLUTION

Cross-vintage reconciliation - an older database export diffed against a recent point census - recovered the actual legacy terminations channel by channel, including landings no surviving record had ever serialized, rebuilt from channel-allocation arithmetic. The corrected schedule was issued before the package reached a cutover plan. Without the catch, a termination crew works dead steel on outage day, on the clock, while the live conductors sit two cabinets away.

THE LESSON

A clean conversion of the wrong plant is still wrong. Documentation is a claim; the installed system is the fact. Migration engineering that does not reconcile the two before the outage window is scheduling its surprises for the one day they cost the most.

Findings drawn from LEITARI(TM)-governed migration engineering. Client and facility identifiers withheld; operational quantities altered to prevent identification. The failure mode, the method, and the outcome are as found.