An upgrade to a Kentucky power plant required engineers to monitor 660 boiler tube temperatures using Type K thermocouples. They considered direct wiring the thermocouples back to their DCS but realized that this was an expensive proposition and that plant noise may cause interference with the low level thermocouple signals. Emerson (DCS vendor) remote I/O was available but at a substantial cost.

Implementing the NCS NET Concentrator System® from Moore Industries provided a more robust and cost-effective solution. We built 14 custom cabinets that were physically mounted around the boiler with short wire runs to the NCS input modules. Having the thermocouples go directly into the NCS decreased the chance of signal interference caused by RFI and electrical noise from the plant. The NCS also eliminated the need for costly intermediate junction boxes and wiring.