

800 – Optimizing Redundancy in critical remote field controllers

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Abstract: Pipelines Department in Saudi Aramco utilizes Remote Terminal Unit (RTU) to monitor and control the pipelines network. An integral part of the pipelines system is gas pressure reducing station that reduces the high pressure of upstream to a suitable operating pressure for customers. The RTU is the main controlling element for the reducing station. The design of an RTU (simplex or redundant) is based on the criticality level of the facility. This paper will focus on a redundant RTU utilized for a critical facility. The paper will share experience-based information on how to manage, optimize the control function of the redundant RTU, and finally will shed some light on how to limit any potential operation failure.