Pentair’s NexSys [Next System] group has been working with gas plants to help provide existing equipment with Pentair’s efficient elements or High Efficiency Elements. The pictures on the left are from a refiner making use of PECO HGC-77V style elements. Fortunately for the plant they got in contact with Pentair personnel and we were able to provide them with a high efficiency 100% sealing element that will not fall apart while in service (pictured on right). This plant operates at 200 MMSCFD and has been operating at a much lower capacity due to inefficient and conventional separation devices. With Pentair’s NexSys team’s design and implementation they have been operating 200 MMSCFD plus since upgrading their separation equipment to Pentair elements.

In addition to the Treated Gas Coalescer, Pentair also provided the refiner with a high efficiency upgrade on their amine filters. They were utilizing conventional elements (pictured on left) that stabbed into the tubesheet of the vessel and upon being brought into service these elements would be unsealed leading to bypass of the filters and very poor amine quality. After the NexSys group designed internals, Pentair was able to upgrade the vessel to the COMPAX® coreless elements (pictured on right). The COMPAX cores support the element from the tubesheet through the length of the vessel allowing the elements suport from the incoming flowrate. This has improved the amine quality at the plant and has kept the elements from being unsealed and avoiding bypass.