



A QUANTA SERVICES COMPANY

SBE CHEMICAL PARTNERS | LLC RAVEN BUTENE-1 PLANT

Project Summary

The Raven Butene-1 Plant is an engineering, procurement, and construction (EPC) project for a linear alpha olefin petrochemical facility on the Gulf Coast that will produce Butene-1, a monomer utilized in the polyethylene industry, by way of a licensed process. This will be the first plant of its type in the United States and will be one of the largest plants using this licensed process in the world.

The project scope included complete EPC of the processing plant, as well as the feed and product pipelines. Project feed and product pipelines total approximately seven (7) miles and include custody transfer metering stations at interconnect points with third-party pipelines. The facility has the ability to load trucks or rail cars with products for additional takeaway opportunities. Plant processes include feed dehydration, catalyst storage and delivery, reactors, product separation, and product storage and delivery. Balance of plant utilities include cooling water, steam, nitrogen, flare systems, and power.

QPSE was the engineering contractor for the entire design of this project, responsible for the overall plant engineering detailed design, including the import and export of pipelines and associated equipment for this facility. The Licensor provided a standard set of Issued for Design P&IDs, upon which QPSE advanced to Issued for Construction. QPSE utilized process modelling software and built a complete 3D model of the facility to assist in the production of engineering deliverables. QPSE engineers produced detailed specifications for vessels, valves, pumps, heat exchangers, distillation equipment, instrumentation, and other process equipment per the Licensor. QPSE designed the utility systems based on operation requirements, which included the cooling water system, steam system, instrument and plant air, nitrogen, power distribution, and flare design. The flare system included a large multi-point ground flare with segregated flare headers, knock-out drums, and associated equipment.

Other Quanta Services companies were involved in the execution of this Project. NorthStar Energy Services worked as the EPC contract holder, providing construction services and engineering support for a portion of the Balance of Plant design. Quanta Capital Solutions financed a portion of the plant.

LOCATION

Texas

AWARD DATE

April 2015

COMPLETION DATE

4Q 2019

SERVICE OFFERING

Pipeline and Facility

HIGHLIGHTS

Turnkey EPC Petrochemical Plant Project

Licensed Linear Alpha Olefin Process

First Plant of Its Kind in United States

