##### October 18, 2019

**TO:** All Interested Parties

**FROM:** Elizabeth Mallett, NAESB Deputy Director

**RE: Wholesale Gas Quadrant (WGQ) Distributed Ledger Technology Standards Development Update**

During the October 17, 2019 WGQ Executive Committee meeting, the committee approved Part A of a joint recommendation in response to Standards Request R18007/2019 WEQ Annual Plan Item 5.a. On September 23, 2019, the Wholesale Gas Quadrant (WGQ) Business Practice Subcommittee, the Electronic Delivery Mechanisms Subcommittee, and the Contracts Subcommittee (Joint WGQ Subcommittees) voted out the recommendation for R18007-A which was submitted to the NAESB Office from Big Data Energy Services, Adjoint Inc., Pariveda, American Electric Power Service, Tennessee Valley Authority, and JKM Energy & Environmental Consulting. The request, which was later captured in 2019 WGQ Annual Plan Item 5, asks that NAESB develop a standard digital representation of natural gas trade events consistent with NAESB WGQ Standard No. 6.3.1 – NAESB Base Contract for Sale and Purchase of Natural Gas (NAESB Base Contract), in order to capitalize on smart contract and distributed ledger technologies. The WGQ Executive Committee Chairs abbreviated the formal comment period for the recommendation from 30 days to 24 days, concluding on October 16, 2019. The recommendation will now be posted for a thirty-day ratification period that will conclude on November 20, 2019.

During its annual meeting in 2018, the NAESB Advisory Council, chaired by Bruce Ellsworth, discussed industry trends as well as how NAESB can position itself to respond to the upcoming needs of the gas and electric industries. The members of the Advisory Council recommended that NAESB consider the development of standards to support the integration of distributed ledger technology into energy transactions, including how blockchain can improve resilience and supply chain integrity and how the technology may support customer-to-customer transactions. Shortly after that meeting, R18007 was submitted to the NAESB office and was assigned to the Joint WGQ Subcommittees to be addressed in the regular course of business.

At the time of assignment, the WGQ Executive Committee requested that the first meeting of the Joint WGQ Subcommittees be held in person and include an educational component to provide those not familiar with distributed ledger technology an opportunity to learn how it may be applied to the commercial practices of the natural gas market. Consistent with the direction provided by the WGQ Executive Committee, the Joint WGQ Subcommittees held a face-to-face meeting in October that included a primer on the application of distributed ledger technology and overview of the standards request.

After that first meeting, the Joint WGQ Subcommittees hit the ground running with a scope of work document containing an approach to address R18007. That approach divided the request into two parts: Part One – The conversion of the NAESB Base Contract for Sale and Purchase of Natural Gas (WGQ Standard No. 6.3.1) into a digital smart contract that can be used with distributed ledger technology; and Part Two – The application of the smart contract and distributed ledger technologies to support efficiencies in the current natural gas settlement process. As work continued throughout the year, the Joint WGQ Subcommittees recognized that Part One would become two separate datasets, one for initiation of the NAESB Base Contract and one for Transaction Confirmations.

As stated above, the Joint WGQ Subcommittees began this effort in October of 2018 and, twelve meetings and conference calls later, voted out the recommendation containing Attachment A (Modifications to the Executive Summary of the 6.0 WGQ Contracts and Standards Manual to include a descriptor of the new business process and a section on Datasets ); Attachment B (the proposed standards language, including Definitions 6.2.z1-6.2.z7 and Standards 6.3.z100-6.3.z107), and Attachment C (the proposed NAESB 6.4.1 Contracts Dataset, including the Technical Implementation of Business Process, Data Dictionary, Code Values Dictionary, and a paper sample). The Joint WGQ Subcommittees anticipate that the recommendation for R18007-B will contain additional definitions, standards and supporting documents. The Joint WGQ Subcommittees will begin discussion on Standards Request R18007-B during its October 28-29, 2019 conference call. All interested parties are welcome to RSVP and attend the meeting.