**1. RECOMMENDED ACTION: EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:**

|  |  |  |  |
| --- | --- | --- | --- |
| X | Accept as requested | X | Change to Existing Practice |
|  | Accept as modified below |  | Status Quo |
|  | Decline |  |  |

**2. TYPE OF DEVELOPMENT/MAINTENANCE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Per Request:** | | **Per Recommendation:** | |
| X | Initiation | X | Initiation |
| X | Modification | X | Modification |
|  | Interpretation |  | Interpretation |
|  | Withdrawal |  | Withdrawal |
|  |  |  |  |
|  | Principle (x.1.z) |  | Principle (x.1.z) |
| X | Definition (x.2.z) | X | Definition (x.2.z) |
| X | Business Practice Standard (x.3.z) | X | Business Practice Standard (x.3.z) |
| X | Document (x.4.z) | X | Document (x.4.z) |
| X | Data Element (x.4.z) | X | Data Element (x.4.z) |
| X | Code Value (x.4.z) | X | Code Value (x.4.z) |
|  | X12 Implementation Guide |  | X12 Implementation Guide |
| X | Business Process Documentation | X | Business Process Documentation |

**3. RECOMMENDATION SUMMARY:**

Request R18007 was submitted by Big Data Energy, Adjoint Inc, Pariveda, American Electric Power Service Corp, Tennessee Valley Authority and JKM Energy and Environmental Consulting and the 2019 WGQ Annual Plan Item 5.a.- 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, in order to capitalize on smart contract and distributed ledger technologies (Blockchain).

The request was assigned to a joint committee of WGQ Business Practices Subcommittee, Contracts Subcommittee and Electronic Delivery Mechanisms Subcommittee (Joint Subcommittee). The Joint Subcommittee Chairs developed an approach to address the request which was approved by the Joint Subcommittee.

The initial approach, divided the R18007 request into two parts:

1. 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.
2. The application of the digital “smart” contract and distributed ledger technologies to support efficiencies in the current natural gas settlement process.

On September 23, 2019, the Joint Subcommittee completed work on **R18007-A** and the recommendation was reviewed and approved by the WGQ Executive Committee on October 17, 2019. The standards and supporting documents approved were:

1. Update the Executive Summary of the NAESB 6.0 WGQ Contracts Standards and Model Manual (Version 3.1 dated September 29, 2017) to include a descriptor of the new business Process and a section on new Datasets.
2. New Standards and Definitions
   1. Definitions 6.2.z1 - 6.2.z7; and
   2. Standards 6.3.z100 – 6.3.z107
3. Recommendation Attachment Added 6.4.1 Contracts Dataset including
   1. Technical Implementation of Business Process;
   2. Data Dictionary;
   3. Code Values Dictionary; and
   4. Paper Sample.

Subsequent to the work on R18007-A, the co-chairs of the Joint Subcommittee proposed to continue the work effort on the request and any resulting standards development under the **R18007-B** effort. This work included:

1. New electronic NAESB WGQ Transaction Confirmation (Exhibit A of 6.3.1 Contract) dataset as well as supporting documents for transaction confirmation for a natural gas sale and purchase transaction under either a WGQ Standard No. 6.3.1 Contract or a new digital Contract Standard No. 6.4.1.; and
2. New NAESB WGQ Invoice dataset and NAESB WGQ Invoice Response dataset as well as supporting documents for an invoice of sale and purchase of natural gas to support related settlement and reconciliation processes under either a WGQ Standard No. 6.3.1 Contract or a new digital Contract Standard No. 6.4.1.

Secondary to the approach for R18007-B above, the Joint Subcommittee recognized development of datasets and supporting document would also require work on prior dataset and supporting documents under R18007-A, the 6.3.1 Contract, Exhibit A of the 6.3.1 Contract, Canadian Addendum and Mexican Addendum and follows.

1. Modification to Executive Summary of the NAESB 6.0 Contracts Standards and Models Manual;
2. Modifications to certain of the prior R18007-A Standards, Definitions, and 6.4.1 Dataset and supporting documents;
3. Minor corrections and clarifications to 6.3.1 Contract, Exhibit A of 6.3.1 Contract, Canadian Addendum and Mexican Addendum for implementation of electronic datasets; and
4. Review the EDM standards for any corresponding changes/additions to existing EDM standards in order to support the modifications to prior documents and new documents.

The Joint Subcommittee also agreed R18007-B work effort would include updates to the NAESB Base Contracts Related Standard’s FAQs under 2020 WGQ Annual Plan item 1 covering the expected use of the data fields in the Transaction Confirmation including implementation of electronic versions of the 6.3.1 Contract and Transaction Confirmations.

This recommendation, **R18007-B** addresses the above items as follows:

Item 1 NAESB WGQ Standard No. 6.4.2 Transaction Confirmation Dataset for initiation of Exhibit A under a 6.3.1 Contract.

Item 2 NAESB WGQ Standard No. 6.4.3 Sale and Purchase Invoice Dataset for invoicing under a 6.3.1 Contract.

Item 3 NAESB WGQ Standard No. 6.4.4 Sale and Purchase Invoice Reponse Dataset for invoicing under a 6.3.1 Contract.

Item 4 Supporting definitions and standards for the use and implementation of WGQ Standard Nos. 6.4.2,

Item 5 EDM standards to support the use and implementation of WGQ Standard No. 6.4.z standard datasets. Note that no EDM manual changes are identified at this time.

Item 6 NAESB WGQ Standard No. 6.4.1 Contracts Dataset modifications to complement the development of the additional datasets.

The Joint Subcommittee recommendation is a continuation of work effort on the remainder of the R18007 request, 2020 WGQ Annual Plan items 1. and 5.b, and presents additional definitions, standards and supporting documents as described above.

The contents of the documents in this recommendation **R18007-B** include:

* Recommendation Attachment A –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachA_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachA_redline.docx>

* Update the Executive Summary of the NAESB WGQ Contracts Standards and Model Manual (Version 3.1 dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_) to include a descriptor of the new business processes and a section on new Datasets.
* Recommendation Attachment B –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachB_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachB_redline.docx>

* Modified and New Definitions and Standards:
  + New Definitions 6.2.z8 and 6.2.z9;
  + Modified Standards 6.3.z101, 6.3.z104, 6.3.z105, 6.3.z106, and 6.3.z107;
  + New Standards 6.3.z108 through 6.3.z124; and
  + Proposed Standard 3.3.1z (subject to final review and full staffing by BPS, IR and Technical Subcommittees).
* Recommendation Attachment C –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachC_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachC_redline.docx>

Modified 6.4.1 Contracts Dataset including:

* + Technical Implementation of Business Process;
  + Data Dictionary;
  + Code Values Dictionary; and
  + Paper Sample.

Recommendation Attachment D - <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachD.docx>

* New 6.4.2 Transaction Confirmation Dataset including:
  + Technical Implementation of Business Process;
  + Data Dictionary;
  + Code Values Dictionary; and
  + Paper Sample.
* Recommendation Attachment E - <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachE.docx>

New 6.4.3 Sale and Purchase Invoice Dataset including:

* + Technical Implementation of Business Process;
  + Data Dictionary;
  + Code Values Dictionary; and
  + Paper Sample.
* Recommendation Attachment F - <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachF.docx>

New 6.4.4 Sale and Purchase Invoice Response Dataset including:

* + Technical Implementation of Business Process;
  + Data Dictionary;
  + Code Values Dictionary; and
  + Paper Sample.
* Recommendation Attachment G –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachG_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachG_redline.docx>

Modifications to 6.3.1 Contract and associated Exhibit A for minor corrections and clarification to implement electronic communications

* Recommendation Attachment H –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachH_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachH_redline.docx>

Modification to Canadian Addendum for minor corrections and clarification to implement electronic communications.

* Recommendation Attachment I –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachI_clean.docx>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachI_redline.docx>

Modification to Mexican Addendum for minor corrections and clarification to implement electronic communications.

* Recommendation Attachment J –

(Clean): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachJ_clean.doc>

(Redlined): <https://www.naesb.org/member_login_check.asp?doc=wgq_r18007-B_rec_attachJ_redline.doc>

Updates to FAQs to the NAESB Base Contract for Sale and Purchase of Natural Gas in reponse to WGQ 2020 Annual Plan Item 1 and modifications to implement electronic communications.

**4. SUPPORTING DOCUMENTATION**

**Joint WGQ Business Practices Subcommittee, Contracts Subcommittee and EDM Subcommittee**

The Joint Subcommittee held 13 one-day and two-day meetings from September 2019 to May 2020 to continue the review and discussion of the Blockchain Request and WGQ 2020 Annual Plan Items 1. and 5.b., and recommended new standards, data dictionaries and code values be developed for an electronic version of the 6.3.1 Base Contract including associated transaction confirmations and invoices.

As a result of the review and discussions, on May 14, 2020 the Joint Subcommittee recommended modification to 5 existing standards, 2 new definitions, and 18 new standards; modification of associated data dictionary and code value tables for the electronic version of the 6.3.1 Base Contract, Exhibit A of 6.3.1 Base Contract (Transaction Confirmation). Invoices under the 6.3.1 Base Contract, and modificaiton to the existing NAESB Base Contract Standards FAQs. The Joint Subcommittee also prepared an implementatioin guide to assist counterparties in their implementation of electronic versions of the new definitions, standards, data dictionary and code values.

The Joint Subcommittee considers this recommendation to complete modification to prior R18007-A and the current work under R18007-B. The Joint Subcommittee anticipates further work on these definitions, standards and supporting documents may be necessary after testing of such standards and datasets. Upon completion of such testing, the Joint Subcommitte will recovene to address request for updates on such definitions, standards and supporting documents generated as a result of such testing. See the meeting minutes of the Joint Subcommittees:

[September 23, 2019](https://www.naesb.org/pdf4/wgq_bps_edm_contracts092319fm.doc)

[October 8-9, 2019](https://www.naesb.org/pdf4/wgq_bps_edm_contracts100819fm.doc)

[October 28-29, 2019](https://www.naesb.org/pdf4/wgq_bps_edm_contracts102819fm.doc)

[November 14-15, 2019](https://www.naesb.org/pdf4/wgq_bps_edm_contracts111419fm.doc)

[December 5-6, 2019](https://www.naesb.org/pdf4/wgq_bps_edm_contracts120519fm.doc)

[January 8-9, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts010820fm.doc)

[January 22-23, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts012220fm.doc)

[February 12-13, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts021220fm.doc)

[March 3-4, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts030320fm.doc)

[March 24-25, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts032420fm.doc)

[April 7-8, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts040720fm.doc)

[April 20-21, 2020](https://www.naesb.org/pdf4/wgq_bps_edm_contracts042020fm.doc)

May 14, 2020

**May 14, 2020 Meeting Vote:**

**Motion 1:** Ms. Crockett, seconded by Mr. Sappenfield, moved to adopt:

(1) New Definitions 6.2.z8 and 6.2.z9;

(2) Modification to Standards 6.3.z101, 6.3.z104, 6.3.z105, 6.3.z106 and 6.3.z107;

(3) New Standards 6.3.z108 through 6.3.z124;

(4) Proposed Standard 3.3.z1 (subject to final review and full staffing by BPS, IR and Technical Subcommittees);

(5) Standard 6.4.2 Transaction Confirmation Dataset including Technical Implementation of Business Process, Data Dictionary, Code Values Dictionary and Paper Sample;

(6) Standard 6.4.3 Sale and Purchase Invoice Dataset including Technical Implementation of Business Process, Data Dictionary, Code Values Dictionary and Paper Sample;

(7) Standard 6.4.4 Sale and Purchase Invoice Response Dataset including Technical Implementation of Business Process, Data Dictionary, and Code Values Dictionary;

(8) updates to the 6.0 Contracts Manual Executive Summary;

(9) modifications to the NAESB WGQ 6.3.1 Contract and associated Exhibit A;

(10) modifications to the NAESB WGQ Canadian Addendum;

(11) modifications to the NAESB WGQ Mexican Addendum:

(12) updates to the FAQs for the NAESB Base Contract for Sale and Purchase of Natural Gas; and

(13) Modifications to the NAESB WGQ 6.4.1 Contracts dataset.

All as reviewed and revised by the Joint Subcommittees on May 14, 2020.

Below are the results of the balanced vote:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Segment | Votes Cast | |  | Balanced Vote | |  |
|  | YES | NO | TOTAL | YES | NO | TOTAL |
| End Users | 2 | 0 | 2 | 2 | 0 | 2 |
| LDCs | 2 | 0 | 2 | 2 | 0 | 2 |
| Pipeline | 2 | 0 | 2 | 2 | 0 | 2 |
| Producer | 1 | 0 | 1 | 1 | 0 | 1 |
| Services | 3 | 0 | 3 | 2 | 0 | 2 |
| Total | 10 | 0 | 10 | 9 | 0 | 9 |