Wholesale Gas Quadrant

TAB 18

Subcommittee Updates

BPS
Information Requirements
Technical
EDM
Contracts

North American Energy Standards Board
1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@aol.com
Home Page: www.naesb.org

TO:	**Business Practices Subcommittee Chairs, Interested Industry Participants**
FROM:	**Rae McQuade, Executive Director**
RE:	**Final Minutes from the Business Practices Subcommittee Meeting, October 14, 2004**
DATE:	**November 11, 2004**

NORTH AMERICAN ENERGY STANDARDS BOARD
WHOLESALE GAS QUADRANT
BUSINESS PRACTICES SUBCOMMITTEE
October 14, 2004 - Hosted by National Fuel Gas
Final Minutes

1. Administrative

Mr. Novak opened the meeting and gave the anti-trust advice. Participants on the call introduced themselves. Mr. Novak reviewed the agenda, which was adopted. The draft minutes for September 1, 2004 were modified and adopted as final.

2. Review of Business Practices Requests for Discussion and Possible Vote

R04014- Northern Natural Gas - Add new Sender's Option Data Element "Preparer Code/Preparer Proprietary Code" to the Measurement Volume Audit Statement 2.4.6 dataset to include the usage of proprietary location data.

Discussion: Ms. Van Pelt reviewed the discussion from the previous meeting.

Motion by Micki Schmitz, seconded by Iris King:

BPS instructs the Information Requirements Subcommittee to accommodate the sender's option business practice of sending a preparer identifier in the Measured Volume Audit Statement (WGQ Standard No. 2.4.6).

There was no discussion on the motion.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	3	0	3	2.00	0.00	2
Pipelines	10	0	10	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0
Services	0	0	0	0.00	0.00	0
	13	0	13	4.00	0.00	4

Motion Passes

R04010 - Natural Gas Pipeline - New data element (BC) to Cap Rel Offer - allows the Releasing Party to specify whether they will allow Replacement Party to change the points outside the primary path.

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Discussion: Ms. Van Pelt reviewed the discussion from the previous meeting.

Motion by Paul Love, seconded by Bill Griffith:
Standardization for R04010 is not necessary at this time.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	3	0	3	2.00	0.00	2
Pipelines	12	0	12	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0
Services	0	0	0	0.00	0.00	0
	15	0	15	4.00	0.00	4

Motion Passes

R04008- Natural Gas Pipeline - New data element (BC) to Cap Rel Offer - allows the Releasing Party to specify whether they will assume financial responsibility for overrun charges when overlapping quantities have been nominated by both Releasing Party and Replacement Party.

Discussion: Ms. Van Pelt reviewed the discussion from the previous meeting. Mr. Love said he would be happy if this request received the same resolution as R04010.

Motion by Paul Love, seconded by Randy Young:
Standardization for R04008 is not necessary at this time.

Discussion: Mr. Novak noted that LDCs were not totally happy with that resolution. While they don't think there is a need to standardize as the request originally said, there is an underlying business practice that is correct and should be promoted. LDCs think the pipeline should honor special terms and conditions, or other instructions provided to pipeline by a means such as what NGPL proposes, that provide for the replacement shipper to be charged the overrun and invoiced accordingly. As an alternative, a light-handed standard or principle might be more appropriate.

Mr. Gracey thought Mr. Novak's request was out of scope because the NAESB meeting participants shouldn't be talking about money issues. Mr. Novak disagreed stating this his suggestion was about invoicing correctly and having the TSP honor the special terms in the capacity release. Mr. Gracey countered that there are no other standards that say who gets billed what.

Mr. Love reminded the subcommittee that this only comes in to play when both parties have access to capacity outside of the path and are using those secondary rights. As long as one is in primary and one is in secondary, and there is no overlap of primary, capacity is allocated to the party with rights to it. Mr. Love thought the solution was unique to each pipeline and needs to be in the tariff and not in the contract terms for a replacement shipper. Mr. Novak agreed that the situation was rare but not rare enough. If it rose to a level of a request, then it warrants discussion. Deals between the releasing and replacement shippers are made through the special terms and conditions but the TSP enters into a contract with the replacement shipper. The TSP should either honor the contract or reject the special terms. Mr. Novak acknowledged that some special terms and conditions can not be easily administered by pipelines and that in those cases, he could understand where a pipeline could not administer such terms and conditions. In this case, however, it is a simple invoicing issue.

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Ms. Davis expressed concern about conflicts between the special terms and conditions and the tariff. Mr. Novak replied that special terms and conditions cannot be in conflict with the tariff and that in such cases, the pipeline should reject the capacity release. Otherwise, if there is nothing in the tariff, then the pipeline should comply with it.

Ms. Van Pelt asked how special terms and conditions could be rejected using EDI. Ms. Schmitz noted there is no contract data set. Mr. Novak said the pipeline just shouldn't issue the contract. Mr. Love added that if the tariff specifies how the situation should be handled, there cannot be specials terms & conditions that override the tariff. Mr. Novak agreed and said he was only referring to situations where the tariff is silent. Mr. Young stated that he thought the specials term & conditions were an agreement between the two parties and outside the bounds of the pipeline. Mr. Love agreed.

Mr. Novak said he thinks this is a discrete case, similar to when capacity is recallable (or not). It is easy to administer and if the tariff doesn't prohibit it or it isn't in violation with a regulation (he didn't think it was), then it should be administered. Releasing shippers only hurt their own release value by including such a special term and condition. Mr. Novak didn't think this business practice needs to be raised to the level where a data element or modification to the EDI data sets is needed; the pipeline just needs to look at the special terms and conditions prior to the billing.

Ms. Van Pelt said that a BC data element would have to be added to the offer upload. It would be the only way to reject the special terms & conditions is if there is an error in the Offer Upload Quick Response. Mr. Burden added he didn't see any errors that deal with special terms & conditions. Mr. Novak replied that maybe there could be an error code that says the specials term & conditions conflicts with the tariff. Mr. Gwilliam noted that it would be a text field. Ms. Van Pelt questioned whether special terms and conditions could be reviewed within the time of Quick Response and she was not sure how it could be done on line.

Mr. Gracey noted he might be able to get on board if the motion requires compliance with a tariff.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	0	2	2	0.00	2.00	2
Pipelines	11	0	11	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0
Services	0	0	0	0.00	0.00	0
	11	2	13	2.00	2.00	4

Motion Fails

Mr. Love stated he had a problem with the road we are going down because the original request was for a specific solution and a more generic solution is being suggested. That should be done under a separate request. Mr. Gwilliam said that he would prefer implementing the standard as proposed by Mr. Love and that he didn't think expanding the request was acceptable. Mr. Love's request is for those pipelines that have that business practice. Mr. Novak said he wanted to give pipelines the latitude on how to implement and not prescribe a specific solution. He then asked the BPS to consider a motion for the next meeting:

Proposed Principle for consideration at next meeting:

If consistent with the TSP tariff, a releasing shipper may designate that a replacement shipper is responsible for over run charges in cases where both shippers nominate secondary out of path overlaps.

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Mr. Novak said that he would probably post a revised motion for consideration after discussion with other LDCs.

3. Review of Business Practices Requests for Discussion Only

R04018- Iroquois Gas Transmission - Add 2 data elements (MA) - Confirmation Downstream Rank (Priority) and Upstream Rank (Priority) to the Confirmation.

Discussion: Mr. Gwilliam explained the request, noting that the two-part confirmation process, which Iroquois has implemented, is as an optional way to handle confirmation. When an operator allows the up / down party to confirm their own quantities, there is a potential for a mismatch as to what the operator says is the rank. The operator is confirming on behalf of the up / down party. For example, at the up / down level, there may be three contracts for which a different total is confirmed. Under the proposed practice, the up / down party has a say in how to allocate the difference amongst the three contracts.

Mr. Gracey explained that Tennessee has been doing this and that NAESB already has a request, R99037, in another subcommittee which may address the same issues as R04018. Ms. Van Pelt, noting that Panhandle uses the same practice, suggested that the Iroquois Request could be sent to IR to see if the implementation for R99037 works. Mr. Gwilliam said he was open to that approach. Mr. Gracey suggested that Iroquois might need one or two more code values.

Because of the circumstances presented by R99037, BPS was able to accept a motion for a vote even though none was initially scheduled.

Motion by Tom Gwilliam, seconded by Bill Griffith:

The Business Practice Subcommittee instructs the Information Requirements Subcommittee to accommodate the mutually agreeable business practice of sending of confirmation upstream / downstream ranks if it is determined that the proposed implementation for R99037 is not sufficient to meet the needs of R04018.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	4	0	4	2.00	0.00	2
Pipelines	11	0	11	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0
Services	1	0	1	1.00	0.00	1
	16	0	16	5.00	0.00	5

Motion Passes

4. Next Meeting(s) and Agenda

10/28/2004 10:00a.m. - 12:00p.m. CCT Conference Call
11/11/2004 10:00a.m. - 12:00p.m. CCT Conference Call

Discussion and Possible Vote:

R04018- Iroquois Gas Transmission

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5. Adjourn

The meeting was adjourned at 12:35 ET.

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Meeting Attendees and Voting Record

Attendee	Organization	10/14/04	Attending	Voting	NAESB WGQ Member?
Pipelines:					
Kim Van Pelt	**Panhandle Eastern Pipe Line**	√	In Person	Y	√
Mike Stender	El Paso Natural Gas	√	In Person	Y	√
Dale Davis	Williams Gas Pipeline	√	In Person	Y	√
Christopher Burden	Williams Gas Pipeline	√	In Person	N	√
Bill Griffith	Colorado Interstate	√	In Person	Y	√
Joe Kardas	National Fuel Gas Supply	√	In Person	Y	√
Mark Pelkey	National Fuel Gas Supply	√	In Person	N	√
Antoinetta Mucilli	National Fuel Gas Supply	√	In Person	N	√
Paul Love	NGPL	√	Phone	Y	√
Kathryn Burch	Texas Eastern Transmission	√	In Person	Y	√
Mark Gracey	Tennessee Gas Pipeline	√	In Person	Y	√
Micki Schmitz	Northern Natural Gas Co.	√	In Person	Y	√
Randy Young	Gulf South Pipeline	√	In Person	Y	√
Tom Gwilliam	Iroquois Gas Transmission	√	In Person	Y	√
Iris King	Dominion Transmission	√	In Person	Y	√
Services:					
Keith Sappenfield	**Encana**	√	**Phone**	**Y**	√
Jennifer Chen	SunGard Energy Systems	√			√
Leigh Spangler	Latitude Technologies	√	Phone	Y	√
Producers:					
Sheri Heslington	**Dominion Exploration**	√	**Phone**	**Y**	√
End Users:					
LDCs:					
Mike Novak	**National Fuel Gas Distribution**	√	**In Person**	**Y**	√
Phil Precht	Baltimore Gas and Electric	√	Phone	Y	√
Marjorie Perlman	Energy East	√	In Person	Y	√
Craig Colombo	Dominion LDCs	√	Phone	Y	√
Associations:					
NAESB Office:					

Bold signifies a BPS Chair **nv – not voting**

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TO:	**Business Practices Subcommittee Chairs, Interested Industry Participants**
FROM:	**Rae McQuade, Executive Director**
RE:	**Draft Minutes from the Joint Meeting of the WGQ Business Practice Subcommittee and RGQ Supplier Utility Interface Subcommittee, October 14, 2004**
DATE:	**October 29, 2004**

NORTH AMERICAN ENERGY STANDARDS BOARD
JOINT MEETING
WHOLESALE GAS QUADRANT
BUSINESS PRACTICES SUBCOMMITTEE
RETAIL GAS QUADRANT
SUPPLIER UTILITY INTERFACE SUBCOMMITTEE

October 14, 2004 - Hosted by National Fuel Gas
Draft Minutes

1. Administrative

Mr. Novak opened the meeting and gave the anti-trust advice. Mr. Novak Chaired for the RGQ and Ms. Van Pelt chaired for the WGQ. Participants on the call introduced themselves. A one-item agenda consisting of discussion on Request R03023 was adopted.

2. Review of Business Practices Requests for Discussion Only

R03023 - PGAS - Proposal for XML File Format as a New Industry Standard for Exchange of Natural Gas Custody Transfer Measurement Data

Discussion Only
Mr. Novak reviewed instructions from the EC. If NAESB proceeds with development of this request, it would be a model and not a standard. The BPS will report back to the EC and await further instructions. If there are business issues, they will be presented to the EC. Any further technical issues will also be discussed at the EC.

Brenda McGough – Sid Richardson Energy - presented the Request for PGAS. The presentation is posted as a workpaper on the WGQ BPS and RGQ SUIS web pages.

Discussion based upon the presentation:

Slide 2: Ms. McGough discussed the merits of XML. Ms. Van Pelt said she though the threshold issue is whether some of the data is already included in other data sets (data dictionary / code value dictionaries, sample papers, TIBP and X12 Cross Reference). Whether or not all pipelines have extensive trading partners, they all are required to support EDI. Pipelines already have to support EBB, EDI X-12 and in some cases, flat files. Mr. Novak questioned whether it is worth adding another means for exchanging this measurement data sets – a good question is why parties are not taking advantage of what is available now. Ms. Van Pelt noted the XML data set requested is a combination of these data sets and that unique combinations of data sets could not be accommodated. Ms. McGough replied that the request was more an example of the type of measurement data to be transfer and not a specific dataset. Ms. Davis noted three data sets – Measurement Information, MVAS and proposed Measurement Events and Alarms.

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Ms. McGough asked if she could take the NAESB data sets to the other vendors to guage their interest in using them as a model for XML. Mr. Novak responded affirmatively and added that NAESB's permission wasn't required if they wished to proceed on a proprietary basis. Ms. McGough said her user group may be more interested in exchanging data as a group initially and then trying to develop it as a standard. Mr. Novak also noted the possibility that an XML front end could be built and then mapped into an X-12 EDI dataset.

Slide 3:
Mr. Stender explained the idea of standard data set meant a new translator would not be needed to communicate with each pipeline. There may be differences between what the pipelines support. Ms. Van Pelt agreed there were differences in the data sets but there was no risk sending the BC or MA data elements to pipelines that don't use them. The dataset cannot be rejected and the sender is sent back a Quick Response that says that piece of data was not processed. SO data elements are in the control of the sender. This approach cushions the providers of data because it minimizes the number of maps. Ms. McGough noted she hadn't see the NAESB data sets until last week but will take them to the user group. Ms Van Pelt suggested that the user group think of the data sets coming from the pipeline. Finally, Mr. Stender noted that some of the issues Ms. Van Pelt brought up (SO, BC or MA) will be the same issue regardless of the format – XML, X-12, or flat files.

Slide 4:
Mr. Novak noted that going back to GISB days, we don't pick winners for vendors, utilities, etc. There would have to be some indication of support beyond the PGAS user group. Ms. Van Pelt added that once NAESB developed a standard, it is no longer a proprietary solution and available for anyone to pick up. In the standards development request, regarding the exchange of data from SCADA to internal measurement systems internally, proprietary internal systems should be off limits for standardization. Mr. Novak noted that's why this request should be a model.

Slide 5:
Ms. Schmitz was puzzled by the term XML / EDI - is it a blend of the EDI style blended with XML or is it a new XML. Ms. McGough replied that the term had nothing to do with EDI X-12. After some discussion, the proper NAESB terminology would be EDM XML.

Slide 6
Mr. Stender asked whether the templates were data dictionaries or data structures. Ms. McGough replied that the template is the mapping. Additionally, the Repository is the data dictionary. The Agent is a part of XML that references the data height definitions to know where the data needs to be stored or in other words, software that directs where the data goes in the data base. Within the presentation, EDI should be equated to EDM – Internet ET that gets the data from point A to Point B.

Slide 7:
SGML, an acronym for Standard Generalized Markup Language, is defined in XML for Dummies as 'A metalanguage used to construct markup languages, such as HTML and XML'. A more general definition for metalanguage is a language that is used to describe information about other languages. For the purposes of our discussion, it is the language from which XML, and some other languages (HTML), are developed.

Slide 8
Mr. Burden noted that this slide compares to what is contained within Version 1.7 as WGQ EDM tab 7 – how to move data from Point A to Point B. Mr. Stender observed that XML takes the data and converts it

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to XML, transports it to other party, puts it back in to a form that the recipient can use. Ms. Schmitz added that it was not unlike the X-12 process today, hands off and transparent. Mr. Stender further described it as a parallel process to what is being done today.

Slide 9
Within XML, Objects were defined as pieces of data.

Slide 10
Mr. Novak asked if use of XML was about scalability, i.e. that small to medium users could embrace it. Ms. McGough responded that such users could purchase XML and not need IT people to work on development with an X12 translator. Most of the potential customers are 'Mom & Pop' organizations. Mr. Stender noted that buying the X-12 translator is expensive and that XML works. Ms. Schmitz added that there still are software providers that can do it for a fraction of the cost.

Slide 11:
This slide acknowledged the existing NAESB data sets. Mr. Novak expressed a desire to have companies join NAESB and participate in both the development and support of the standards. If development takes place, it's critical that the work product isn't disseminated in a manner that bypasses the NAESB process. Referencing the third bullet of the slide, Ms. Schmitz noted the possibility that some of the data in the examples may not be in the existing data sets.

Slide 12:
Mr. Novak asked Ms. McGough to discuss all the information exchanged today with her user group and examine whether the Request really captures what they need. Additionally, please ask whether they will help do the work because NAESB's resources are no without limits. Ms. Davis noted that since NAESB is an ANSI accredited organization, we need to look at ANSI website (www.disa.org) to determine their XML requirements. Mr. Burden added that ANSI does require certain rules - they use eBXML. Ms. Schmitz observed that the PGAS request did not utilize eBXML.

Post Presentation Discussion:
Mr. Burden stated that if NAESB is going to pursue XML development for this request, multiple vendors need to be involved so that NAESB doesn't 'pick a winner'. Mr. Novak added that NAESB needs to wait until we hear back from PGAS. BPS can report to the EC that we had a 'get to know you session', that they are trying to use our existing data sets and that we want to use eBXML. We will wait to hear back from PGAS before we proceed on what they are really looking for, what they are willing to contribute to the effort and how useful it is going to be.

3. Next Meeting(s) and Agenda

Based upon discussion during the meeting, it was determined that scheduling subsequent meetings on Request R03023 would be premature.

4. Adjourn

The meeting was adjourned at 2:40 PM ET.

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Meeting Attendees and Voting Record

Attendee	Organization	10/14/04	Attending	NAESB Member?
WGQ Pipelines:				
Kim Van Pelt	**Panhandle Eastern Pipe Line**	√	In Person	√
Mike Stender	El Paso Natural Gas	√	In Person	√
Dale Davis	Williams Gas Pipeline	√	In Person	√
Christopher Burden	Williams Gas Pipeline	√	In Person	√
Bill Griffith	Colorado Interstate	√	In Person	√
Joe Kardas	National Fuel Gas Supply	√	In Person	√
Antoinetta Mucilli	National Fuel Gas Supply	√	In Person	√
Donna Scott	Transwestern Pipeline Company	√	Phone	√
Kathryn Burch	Texas Eastern Transmission	√	In Person	√
Mark Gracey	Tennessee Gas Pipeline	√	In Person	√
Micki Schmitz	Northern Natural Gas Co.	√	In Person	√
Randy Young	Gulf South Pipeline	√	In Person	√
Tom Gwilliam	Iroquois Gas Transmission	√	In Person	√
Iris King	Dominion Transmission	√	In Person	√
WGQ Services:				
Brenda McGough	Sid Richarson	√	Phone	N
WGQ Producers:				
WGQ End Users:				
WGQ LDCs:				
Marjorie Perlman	Energy East	√	In Person	√
Craig Colombo	Dominion LDCs	√	Phone	√
RGQ Suppliers:				
Marcy McCain	Texas Eastern Transmission	√	In Person	√
RGQ Distributors:				
Mike Novak	**National Fuel Gas Distribution**	√	**In Person**	√
Phil Precht	Baltimore Gas and Electric	√	Phone	√
RGQ End Users:				
RGQ Services:				
Leigh Spangler	Latitude Technologies	√	Phone	√
RGQ Observers:				
Paul Emerson	New York State DPS	√	In Person	√
NAESB Office:				

Bold signifies a BPS or SUIS Chair **nv – not voting**

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TO:	Posting for Interested Industry Participants
FROM:	BPS Chairs (Tina Burnett, Sheri Heslington, Mike Novak, Keith Sappenfield, Kim Van Pelt) Rae McQuade, Executive Director
RE:	Draft Agenda for the WGQ Business Practices Subcommittee – November 11, 2004
DATE:	October 29, 2004

NORTH AMERICAN ENERGY STANDARDS BOARD

CONFERENCE CALL
WHOLESALE GAS QUADRANT
BUSINESS PRACTICES SUBCOMMITTEE

Thursday, November 11, 2004
10:00a.m. – 12:00p.m. Central

DRAFT AGENDA

Please call the NAESB office (713-356-0060) for the phone number, conference leader, and pass code

1. **Administrative:**
   Welcome, Antitrust, Attendee Roll Call,
   Adoption of Agenda,
   Adoption of 10/14/2004 Draft Meeting Minutes – BPS Meeting
   Adoption of 10/14/2004 Draft Meeting Minutes – BPS/SUIS Meeting

2. **Review of the following Business Practices Requests for discussion and possible vote:**

R04018	**Iroquois Gas Transmission**	**Discussion only**
R04008	**Natural Gas Pipeline**	**Discussion and possible vote**

3. **Next Meeting(s) and Agenda**

4. **Adjourn**

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Via email and posting

TO: Wholesale Gas Quadrant Business Practices Subcommittee, Wholesale Electric Quadrant Business Practices Subcommittee, and Interested Parties

FROM: Rae McQuade, Executive Director

RE: WGQ BPS and WGQ BPS Energy Day Meeting Draft Agenda, hosted by KeySpan Energy, Brooklyn, NY, December 1-2, 2004

DATE: November 5, 2004

Dear Interested Industry Participants,

The WGQ BPS and the WEQ BPS are meeting jointly on December 1st and 2nd, 2004 to discuss Request Number R04016 (http://www.naesb.org/pdf/r04016.pdf). This request seeks the development of a standard energy day that would apply to both the natural gas and the electric industries. The request states the chief benefit of a standard energy day would be that it would foster the coordination of scheduling between electric and natural gas and allow both industries to be able to more closely match fuel deliveries to generation requirements. Additionally, the request states the motivation behind the request for establishment of a standard energy day came as a result of the work of the NAESB Gas/Electric Coordination Task Force (GECTF).

The meeting will be hosted by KeySpan Energy, and will take place at KeySpan Energy's offices at One MetroTech Center, Conference Room 2-06, Brooklyn, New York, 11201. The meeting will take place on December 1st from 10:00 a.m. to 4:00 p.m. Eastern time, and on December 2nd from 9:00 a.m. to 3:00 p.m. Eastern time.

This meeting as with all NAESB meetings is open. For meeting arrangements, please see the information posted at http://www.naesb.org/pdf/weq_wgq_bps120104ma.doc. Conference calling will be made available for those who are unable to attend the meeting in person. If you have any questions, please call the NAESB office at 713-356-0060, or e-mail vthomason@naesb.org.

Best Regards,

Rae McQuade, Executive Director

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WGQ BPS and WGQ BPS Energy Day Meeting
Brooklyn, NY hosted by KeySpan Energy
December 1-2, 2004
Draft Agenda

1) Administrative Items
   - Welcome and Introductions
   - Antitrust
   - Adoption of Agenda

2) Requesters Presentation(s)

3) Scope Clarification from the WGQ and WEQ Executive Committees

4) Education Presentation(s)
   - Wholesale Electric Quadrant
   - Wholesale Gas Quadrant

5) Issues
   - Identification
   - Categorization
   - Prioritization

6) Next Steps

7) Other Business

8) Future Meetings

9) Adjourn

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

DRAFT MINUTES

1. **Introductions –** participants introduced themselves

2. **Housekeeping –** Lisa Harrison (National Fuel) provided the housekeeping.

3. **Anti-trust Guidelines** – Dale Davis read the anti-trust

4. **Adoption of Agenda –** The agenda was adopted as modified to add as the first item of business a brief discussion on an issue discovered by the Technical Subcommittee on October 12, 2004 regarding two of the Transactional Reporting data dictionaries.

5. **Approval of Prior Meeting Minutes & Attachment**
   - August 25, 2004 – The draft minutes and Attachments 1, 2, 3 and 5 as posted and Attachment 4 as modified were adopted as final.

6. Address Current Requests for Initiation or Enhancement of NAESB Standards and items transferred from other NAESB subcommittees -- Discussion, Q&A and a balanced vote for each item. (The items will be addressed in the order listed. The time allotted for the work of the subcommittee will be divided between the new data sets and the routine maintenance items.)

Transactional Reporting
During the Technical Subcommittee meeting of October 12, 2004, it was discovered that in the Capacity Release and the Firm Transactional Reporting data dictionaries, the EDI usage for Location Name is shown as 'C' whereas the EDI usage for the same data element is 'SO' in the Interruptible Transactional Reporting data dictionary. When this data element was added to the transactional reporting data dictionaries as a part of R99024, it was created to replace the former data elements for GTP1 / 2 Description. Prior to that time, the GTP1 / 2 Description data elements had an EDI usage of SO in all three data dictionaries. Technical concluded that the EDI usage for Location Name in the Capacity Release and Firm data dictionaries should be SO. IR reviewed the issue and agreed with Technical's conclusion.

MOTION:
The EDI usage for the data element Location Name in the Capacity Release and Firm Transactional Reporting data dictionaries should be 'SO'.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	0	0	0	0.00	0.00	0
Pipelines	8	0	8	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0
Services	0	0	0	0.00	0.00	0

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

	8	0	8	2.00	0.00	2

Routine Maintenance Items:

Capacity Release Related Requests (IR Log Round 2)

- **R98037 – Columbia Gas**

Request: Add a non-text data element to tie offers of a Not-Stand-alone offer together in UPPD and non-pre-arranged deals

(Relevant Minutes: BPS 12/16/99, 1/6/00, 1/13/00, and 5/5/04; IR 7/14/04, 8/25/04; BPS 9/1/04)

Review response from BPS meeting of September 1, 2004 to IR's memo dated August 27, 2004:

Response from BPS:

In response to IR's memo of August 27, 2004 regarding R98037, BPS instructs IR to make the new 'package identifier type' data element BC as described by IR in its memo.

IR Discussion:

See attached workpaper (Attachment 1) for the proposed implementation as summarized below

- Add Offer Package Identifier to header level in:
  - 5.4.1 –Offer Download
  - 5.4.7 – Offer Upload
  - 5.4.8 – Offer Upload Quick Response
  - 5.4.9 – Offer Upload Notification
  - 5.4.2 – Bid Download
  - 5.4.18 – Bid Upload
  - 5.4.19 – Bid Upload Quick Response

  Note: Offer Package Identifier not added to Final Disposition or Offer Upload Bidder Confirmation since tracking number leads you to the details of the deal

- Modifications to TIBPs for:
  - 5.4.7 – Offer Upload
  - 5.4.1 – Offer Download
  - 5.4.18 – Bid Upload
  - 5.4.2 – Bid Download

The proposed implementation will vote on this at the next month in order to give the requester a chance to review it.

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

- **R00010 – Enron (Northern Border)**

  Request: Add Rate Identification Codes to the sub-detail level of the NAESB WGQ Std.:

  5.4.1 Offer Download,
  5.4.2 Bid Download,
  5.4.3 Award Download,
  5.4.7 Offer Upload,
  5.4.8 Offer Upload Quick Response,
  5.4.9 Offer Upload Notification,
  5.4.18 Bid Upload and
  5.4.19 Bid Upload Quick Response.

  (Relevant Minutes: EC 6/15/00; IR 7/14/04, 8/25/04)

  IR Discussion:
  Discussion was postponed until the December, 2004 meeting in order for the requester to be present.

Nominations Related Requests (IR Log Round 3)

- **R00006 – El Paso Eastern (Southern Natural)**

  Request: Add 12 new code values for data element Transaction Type in the nomination, flowing gas (as appropriate) and invoicing (as appropriate) related data sets. (Note: a revised request was submitted with revision to the code values requested)

  (Relevant Minutes: EC 4/13/00; BPS 6/22/00, 6/29/00, 8/3/00; IR 7/14/04, 8/25/04)

  Note: Previous R00006 was assigned to be worked on with Great Lakes Request R00003. Great Lakes has withdrawn its request.

  IR Discussion:
  Requested code values per the amended request are:

  FTNN
  FTNN- Small Shipper
  Capacity Release – Volumetric
  Current Business/Firm Storage
  Current Business/Interruptible storage
  FTNN /Firm Storage
  FTNN /Interruptible Storage
  FTNN Small Shipper/Firm Storage
  FTNN Small Shipper/Interruptible Storage
  Capacity Release-Volumetric/Firm Storage
  Capacity Release-Volumetric/Interruptible Storage
  No-Notice Service Small Shipper

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
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In addition, as a result of Order 637, the requester has indicated they currently use and need the following code values:

Segmented transport
Segmented transport / CSS (CSS = contract storage service = firm storage)
Segmented transport / ISS (ISS = interruptible storage service)
ST Volumetric Transport (ST = segmented transportation)
ST Volumetric Transport /CSS
ST Volumetric Transport / ISS

The requester explained that they provide service under a master contract concept. The capacity is differentiated by the type of service the shipper is utilizing. For this requester, a master storage contract allows shippers to nominate in excess of their firm storage rights (withdrawal / injection) under an interruptible storage service. The volumetric transportation is only billed based on what the shipper schedules versus non-volumetric shippers pay the reservation charge regardless if they use it.

Attached (Attachment 2) is a matrix that sets forth the requested code values, the questions posed to the requester by IR, the response received from the requester during this meeting and IR's proposed code value descriptions and definitions. The requester will review the information contained in the matrix and provide feedback for the next IR meeting.

- **R01013 - Williams Gas Pipeline**

Request: Add code value "Exceeded Contract MDQ – Segmentation" for data element Reduction Reason Code in Scheduled Quantity and Scheduled Quantity for Operator

(Relevant Minutes: EC – 4/19/01; IR 8/25/04)

IR Discussion:

The requester reported that upon review of the implementation for R03004 as proposed at the August 25, 2004 IR meeting, it will satisfy the request R01013.

Motion: Reflect that the implementation proposed for Request R03004 at the IR meeting August 25, 2004 also satisfies Request R01013.

Vote				Balanced	Balanced	Balanced
	For	Against	Total	For	Against	Total
End Users	0	0	0	0.00	0.00	0
LDCs	0	0	0	0.00	0.00	0
Pipelines	8	0	8	2.00	0.00	2
Producers	0	0	0	0.00	0.00	0

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

Services	0	0	0	0.00	0.00	0
	8	0	8	2.00	0.00	2

- **R01008 – Enron (Transwestern**)

  Request: Add code value 'Meter Bounce – Overrun' for data element Transaction Type in NAESB WGQ Std. 1.4.1 - Nomination (1.4.1), 1.4.5 - Scheduled Quantity, 2.4.1 - Pre-determined Allocation, 2.4.3 - Allocation, 2.4.4 - Shipper Imbalance and 3.4.1 - Transportation/Sales Invoice data sets

  (Relevant Minutes: EC 2/22/01)

  IR Discussion:
  IR reviewed the request and the existing transaction type for 'meter bounce'

  Proposed Implementation:

  Document Name and No.:

Nomination	1.4.1
Scheduled Quantity	1.4.5
Pre-determined Allocation	2.4.1
Allocation	2.4.3
Shipper Imbalance	2.4.4
Transportation/Sales Invoice	3.4.1

  Data Element: Transaction Type

Code Value Description	Code Value Definition	Code Value
Meter Bounce – Overrun	Transportation which exceeds contract capacity rights for which authorization has been granted and which changes contracts at an interconnect but does not leave the Transportation Service Provider's system.	

  The proposed implementation will vote on this at the next month in order to give the requester a chance to review it.

7. Other Business
None

8. Next Meeting Dates and Location

Nov 17 – DC – Williams
1627 Eye St. NW

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

Suite 900
Washington, DC 20006

9. Adjourn

NAESB WGQ Information Requirements Subcommittee Meeting
October 13, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Williamsville, NY
Host: National Fuel

Meeting Attendees

Attendee	Organization	10/13/04	NAESB Member?
Pipelines:			
Kathryn Burch	Duke Energy – Texas Eastern Transmission	√	√
Christopher Burden	Williams Gas Pipeline	√ (nv)	√
Dale Davis	Williams Gas Pipeline	√	√
Mark Gracey	Tennessee Gas Pipeline	√	√
Bill Griffith	CIG	√	√
Tom Gwilliam	Iroquois Gas Transmission	√	√
Micki Schmitz	Northern Natural Gas	√	√
Mike Stender	El Paso Natural Gas	√	√
Kim Van Pelt	Panhandle Eastern Pipe Line	√	√
Randy Young	Gulf South Pipeline Company LP	√	√
Services:			
Producers:			
End Users:			
LDCs:			
Associations:			

Bold signifies Chair
nv = not voting

NAESB WGQ Information Requirements Subcommittee Meeting
November 17, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Washington, DC
Host: Williams Gas Pipeline

DRAFT AGENDA

Meeting Location:
Williams' Offices
1627 Eye Street NW
Suite 900.
Washington, DC 20006

NOTE: For security purposes please advise the NAESB Office if you plan to attend so that a list can be provided to the host company.

Please note: In keeping with policies that have been observed for many years by IR chairs, participation in this meeting by telephone will not be available.

1. Introductions

2. Housekeeping

3. Anti-trust Guidelines

4. Adoption of Agenda

5. Approval of Prior Meeting Minutes & Attachment
- October 13, 2004

6. Address Current Requests for Initiation or Enhancement of NAESB Standards and items transferred from other NAESB subcommittees -- Discussion, Q&A and a balanced vote for each item. (The items will be addressed in the order listed. The time allotted for the work of the subcommittee will be divided between the new data sets and the routine maintenance items.)

Routine Maintenance Items:

Capacity Release Related Requests (IR Log Round 2)

- **R98037 – Columbia Gas**
  Request: Add a non-text data element to tie offers of a Not-Stand-alone offer together in UPPD and non-pre-arranged deals

  (Relevant Minutes: BPS 12/16/99, 1/6/00, 1/13/00, and 5/5/04; IR 7/14/04, 8/25/04; BPS 9/1/04, IR 10/13/04)

  Review and vote on proposed implementation. – See Attachment to Draft Minutes for 10/13/04

NAESB WGQ Information Requirements Subcommittee Meeting
November 17, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Washington, DC
Host: Williams Gas Pipeline

- **R00010 – Enron (Northern Border)**

  Request: Add Rate Identification Codes to the sub-detail level of the NAESB WGQ Std.:

  5.4.1 Offer Download,
  5.4.2 Bid Download,
  5.4.3 Award Download,
  5.4.7 Offer Upload,
  5.4.8 Offer Upload Quick Response,
  5.4.9 Offer Upload Notification,
  5.4.18 Bid Upload and
  5.4.19 Bid Upload Quick Response.

  (Relevant Minutes: EC 6/15/00; IR 7/14/04, 8/25/04)

  Action on this item is pending receipt of additional information from the requester.

Nominations Related Requests (IR Log Round 3)

- **R00006 – El Paso Eastern (Southern Natural)**

  Request: Add 12 new code values for data element Transaction Type in the nomination, flowing gas (as appropriate) and invoicing (as appropriate) related data sets. (Note: a revised request was submitted with revision to the code values requested)

  (Relevant Minutes: EC 4/13/00; BPS 6/22/00, 6/29/00, 8/3/00; IR 7/14/04, 8/25/04, 10/13/04)

- **R01008 – Enron (Transwestern**)

  Request: Add code value 'Meter Bounce – Overrun' for data element Transaction Type in NAESB WGQ Std. 1.4.1 - Nomination (1.4.1), 1.4.5 - Scheduled Quantity, 2.4.1 - Pre-determined Allocation, 2.4.3 - Allocation, 2.4.4 - Shipper Imbalance and 3.4.1 - Transportation/Sales Invoice data sets

  (Relevant Minutes: EC 2/22/01, IR 10/13/04)

  Review and vote on proposed implementation. – See Attachment to Draft Minutes for 10/13/04

- **R01010 – Enron (Northern Natural**)

  Request: Add 10 code values for the data element 'Reduction Reason' in NAESB WGQ Std. 1.4.4 - Confirmation Response, 1.4.5 - Scheduled Quantity and 1.4.6 - Scheduled Quantity for Operator datasets.

  (Relevant Minutes: EC 2/22/01)

NAESB WGQ Information Requirements Subcommittee Meeting
November 17, 2004 – 8:30 – 4:00 p.m. (Eastern Time)
Washington, DC
Host: Williams Gas Pipeline

Flowing Gas Related Requests (IR Log Round 3)

- **R00005 – Tennessee Gas**
  Request: Add new data element "Swing Fuel Option Ind" ("SG Fuel Opt") to the Pre-determined Allocation (2.4.1)

  (Relevant Minutes: EC – 4/13/00; BPS: 1/18/01, 2/1/01)

- **R01011 – CMS (Panhandle Eastern Pipeline)**
  Request: Add a warning message for the data element Validation Code in the Pre-determined Allocation Quick Response (2.4.2)

  (Relevant Minutes: EC: 2/22/01)

- **R02007 – Tennessee**
  Request: Add a new data element "Notes Codes" and two related codes for the Invoicing data sets NAESB Standard 3.4.1

  (Relevant Minutes: EC 8/22/02; BPS 10/24/02, 11/1/02)

7. Other Business

8. Next Meeting Dates and Location

9. Adjourn

NOTE 1: The Chair has the discretion to extend meeting times to complete the agenda.

North American Energy Standards Board
1100 Louisiana, Suite 3625, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@aol.com
Home Page: www.naesb.org

TO:	NAESB WGQ Technical Subcommittee Participants Posting for Interested Industry Participants
FROM:	Rae McQuade, Executive Director Kim Van Pelt, Chairman, NAESB Technical Subcommittee
RE:	**Draft Agenda** for NAESB WGQ Technical Subcommittee Meeting – November 16, 2004
DATE:	October 29, 2004

NAESB WGQ Technical Subcommittee Meeting

Tuesday, November 16, 2004
8:30a.m-4:00p.m. ET

Williams' Office
1627 Eye Street NW
Suite 900
Washington DC 20006

DRAFT AGENDA

1. Welcome and Introductions

2. Anti-trust Warning

3. Adoption of Agenda

4. Adoption of Meeting Minutes
August 24, 2004
October 5, 2004
October 12, 2004

5. Address Current Requests for Initiation or Enhancement of NAESB Standards

Transactional Reporting
Final review of x12 data maintenance request and sample for submission to x12.

R98018 Receipt/Delivery Reduction Quantity
Review status of x12 data maintenance request x12dmr35. Modify recommendation, if needed, based on IR modifications.

R03015 Threaded Rank usages
Modify Nomination and Scheduled Quantity x12 based on IR modifications.

R99037 Confirmation Role
Review status of x12 data maintenance request x12dmr37. Modify recommendation, if needed, based on IR modifications.

R99031/R03008 Cycle Indicator
Review status of x12 data maintenance request x12dmr36. Modify recommendation, if needed, based on IR modifications.

R98081/R98082 Measurement Events and Alarms
Develop working document for x12 data set.

R99013 Pre-approved Bidder's List
Review status of x12 data maintenance request. Review status of working document.

R98047 Supported Code Values
Develop working document for x12 data set.

North American Energy Standards Board
1100 Louisiana, Suite 3625, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@aol.com
Home Page: www.naesb.org

R98048 **Fuel Information**
Develop working document for x12 data set.

R99033/R96018 **Operationally Available Capacity**
Modify data sets based on IR recommendations.

R97110 **Capacity Release Posting Date/Time**
Modify data sets based on IR recommendations.

R03004/R01013 **Reduction Reason Code**
Modify data sets based on IR recommendations.

R02006 **Nomination Quick Response Validation Codes**
Modify data sets based on IR recommendations.

R00004 **PDA Limit Type**
Modify data sets based on IR recommendations.

6. Other Business

7. Next Meeting Date and Location

8. Adjourn

*Please RSVP to NAESB Office for security purposes. See posted meeting arrangements for specific location of the meeting.

NORTH AMERICAN ENERGY STANDARDS BOARD
WGQ EDM SUBCOMMITTEE
Tuesday, October 5, 2004

DRAFT MEETING MINUTES

Attendees:

Christopher Burden	Williams Gas Pipeline	Webcast
Greg Dodson	Dominion	Webcast
Mike Stender	El Paso Natural Gas	Webcast

Christopher called the meeting to order at 9:10 am.

The antitrust guidelines were read.

The agenda reviewed and approved.

The draft minutes from the October 1, 2004 EDM meeting were reviewed and approved as final.

Reviewed the draft recommendation form, changed dates in the header/footer, updated date for WGQ EDM meeting discussed (add today's date).

Reviewed the WGQ QEDM draft manual. Made minor modifications to the text such as deleting double periods, correcting font inconsistencies, spacing, bolding, and updated footnote numbering in the Appendices tab.

Motion:
Adopt the recommendation for NAESB WGQ Annual Plan item number 7 and the accompanying attachment (WGQ QEDM manual) and send to the EC for review and approval.

Vote				Balancing Determinant	Balanced	Balanced	Balanced
	For	Against	Total		For	Against	Total
End Users	0	0	0	0	0.00	0.00	0
LDCs	0	0	0	0	0.00	0.00	0
Pipelines	2	0	2	2	2.00	0.00	2
Producers	0	0	0	0	0.00	0.00	0
Services	1	0	1	1	1.00	0.00	1
	3	0	3	3	3.00	0.00	3

The meeting was adjourned at 10.20 am.

North American Energy Standards Board
1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@aol.com
Home Page: www.naesb.org

TO: **REQ/RGQ SUIS members, WGQ Contracts Subcommittee members, Posting for Other Interested Industry Participants**

FROM: **Bill Newbold, Detroit Edison, REQ SUIS Co-Chair**
Suzanne Calcagno, UBS Warburg Energy, RGQ SUIS Co-Chair/WGQ Contracts Co-Chair
Keith Sappenfield, EnCana Energy Marketing (USA) Inc., WGQ Contracts Sub.

RE: **Agenda for REQ/RGQ SUIS - WGQ Contracts Subcommittee Meeting (Call/Web-Meeting) November 4, 2004**

DATE: **November 2, 2004**

NORTH AMERICAN ENERGY STANDARDS BOARD

REQ/RGQ Joint Supplier-Utility Interface Subcommittee (SUIS) Meeting

With

WGQ Contracts Subcommittee

MEETING ANNOUNCEMENT

CONFERENCE CALL/WEB-MEETING

WHEN: **Thursday November 4, 2004**

12:00 Noon – 3:00 PM (Central)

Please contact the NAESB office (713-356-0060) for conference details.

PURPOSE:

Discussion of questions posed by REQ/RGQ SUIS for WGQ Contracts subcommittee about terms, wording of WGQ Trading Partner Agreement that raised issues in revising the document for retail use.

Participants are asked to review the Trading Partner Agreement, as modified by SUIS on September 27 and also the SUIS list of questions for WGQ Contracts Subcommittee resulting from that meeting.

Any materials for the meeting will be posted on the web site.

The meeting is open to any interested party. As always, the chair reserves the right to extend the time of the meeting to ensure that agenda items are addressed. The times indicated on the agenda will be followed to ensure that agenda items are allotted appropriate time slots. Should an agenda item conclude earlier than its stated time slot, the remaining time can be allotted to other agenda items at the discretion of the chair.

Please feel free to call the NAESB office should you have any questions or comments.

North American Energy Standards Board
1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@aol.com
Home Page: www.naesb.org

REQ/RGQ Joint Supplier-Utility Interface Subcommittee (SUIS) Meeting
With
WGQ Contracts Subcommittee

AGENDA

Thursday November 4, 2004 (12:00 Noon – 3:00 PM Central)

12:00 – 12:15 1. **Administrative**
- Welcome to members and attendees
- Antitrust Guidelines
- Introductions
- Adoption of Agenda
- Adoption of Draft Minutes of September 27, 2004 SUIS Conference Call

12:15 – 1:30 2. **Discussion of SUIS Questions for WGQ Contracts Subcommittee**

1:30 – 1:45 3. **Break**

1:45 – 2:45 4. **Discussion of SUIS Questions for WGQ Contracts Subcommittee (Cont'd)**

2:45 – 3:00 5. **Next Steps**
- Next steps on R04017
- Next SUIS Meeting – November 12, 2004 (9:00 AM – 2:00 PM Central)
- Future Meetings
  Dates, types, locations

3:00 6. **Adjourn**

Wholesale Gas Quadrant

TAB 19

Proposed Standards – R04019 – ISDA Annex

North American Energy Standards Board
1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

via email and posting

TO:	NAESB WGQ Members and Interested Industry Participants
FROM:	Denise Rager, Membership and Meeting Administrator
RE:	Wholesale Gas Quadrants Request For Comments on Recommendation R04019 and WGQ Annual Plan Item 9 -ISDA Gas Annex Adopted by the WGQ Contracts Subcommittee - Due November 17, 2004
DATE:	October 18, 2004

An industry comment period begins today, October 18 and ends on November 17, 2004 for recommendation R04019 and 2004 WGQ Annual Plan Item 9 - ISDA Gas Annex Adopted by the WGQ Contracts Subcommittee. The WGQ Executive Committee will meet on November 18, 2004 to review this recommendation and consider it for adoption as a NAESB Model Business Practice.

The recommendation (R04019) can be accessed from the NAESB Web site at the following link http://www.naesb.org/pdf/2004_wgq_r04019.doc , as well as, the ISDA Gas Annex Model Form http://www.naesb.org/pdf/2004_wgq_r04019a1.doc and the User's Guide for the ISDA Gas Annex http://www.naesb.org/pdf/2004_wgq_r04019a2.doc. The documents are also attached to this request for comment. All comments received by the NAESB office by end of business on November 17 will be posted on the Home Page and forwarded to the WGQ EC members for their consideration. If you have difficulty retrieving this document, please call the NAESB office at (713) 356-0060.

Best Regards,

Denise Rager

cc: Rae McQuade, Executive Director

RECOMMENDATION TO
NAESB WGQ EXECUTIVE COMMITTEE

Requester: WGQ Contracts SC **Request No.: R04019 & 2004 AP Item 9**

1. Recommended Action:

___Accept as requested
_X_Accept as modified below
___Decline

Effect of EC Vote to Accept Recommended Action:

_X_Change to Existing Practice
___Status Quo

2. TYPE OF MAINTENANCE

Per Request:

___Initiation
_X_Modification
___Interpretation
___Withdrawal

___Principle (x.1.z)
___Definition (x.2.z)
_X_Business Practice Standard (x.3.z)
___Document (x.4.z)
___Data Element (x.4.z)
___Code Value (x.4.z)
___X12 Implementation Guide
___Business Process Documentation

Per Recommendation:

___Initiation
_X_Modification
___Interpretation
___Withdrawal

___Principle (x.1.z)
___Definition (x.2.z)
_X_Business Practice Standard (x.3.z)
___Document (x.4.z)
___Data Element (x.4.z)
___Code Value (x.4.z)
___X12 Implementation Guide
_X_Business Process Documentation

3. RECOMMENDATION

SUMMARY:

- Add proposed ISDA Gas Annex as a Model Form under NAESB WGQ Standard 6.3.zA and NAESB WGQ Standard 6.3.zb (ISDA Gas Annex User's Guide).

RECOMMENDATION TO
NAESB WGQ EXECUTIVE COMMITTEE

Requester: WGQ Contracts SC **Request No.: R04019 & 2004 AP Item 9**

STANDARDS LANGUAGE:

For Proposed WGQ Standard 6.3.zA (Model Form of ISDA Gas Annex) see Exhibit "A" attached.

For Proposed WGQ Standard 6.3.zB (ISDA Gas Annex User's Guide) see Exhibit "B" attached.

4. SUPPORTING DOCUMENTATION

a. Description of Request:

Request R040419 submitted by EnCana Marketing (USA) Inc. (copy attached) and 2004 Annual Plan Item 9 – "Review and develop ISDA Gas Annex."

b. Description of Recommendation:

WGQ Contracts Subcommittee

See the WGQ Contracts Subcommittee (Contracts) meeting minutes, meeting minute attachments, filed comments and various document drafts for the supporting documentation, discussion, and voting records for the following dates:

June 18, 2004
August 31, 2004
September 21, 2004
September 28, 2004
October 15, 2004

c. Business Purpose:

See Meeting minutes set forth in item b. above.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

See Meeting minutes set forth in item b. above.

ISDA NORTH AMERICAN GAS ANNEX
to the Schedule to the
ISDA Master Agreement
dated as of ……..
between
…… and ……..

This Gas Annex supplements, forms part of, and is subject to the above-referenced Agreement and is part of the Schedule thereto.

(a) Physical Gas Transactions under this Agreement; Credit Support Documents

(i) ***Physical Gas Transactions under this Agreement***. The provisions of this Gas Annex shall apply solely to transactions between the parties for the purchase or sale of physical Gas with delivery points in North America on a Firm or Interruptible basis on a spot or forward basis or as an option to purchase or sell Gas (collectively, "Gas Transactions"). All Gas Transactions will be deemed to have been entered into in accordance with the terms of this Agreement and shall be Transactions for all purposes of this Agreement. A subsequent agreement between the parties to settle a Gas Transaction without involving a physical delivery of Gas shall not affect such Gas Transaction's status as a Gas Transaction under this Gas Annex. In the event of any inconsistency among or between the other provisions of this Agreement and this Gas Annex, this Gas Annex will govern with respect to Gas Transactions. In the event of any inconsistency between the Confirmation for a Gas Transaction and this Gas Annex, the Confirmation will govern with respect to such Gas Transaction, except as provided in clause (a)(ii) with respect to Outstanding Gas Transactions.

(ii) ***Applicability to Outstanding Gas Transactions***. Gas Transactions executed by the parties prior to the effectiveness of this Gas Annex and selected under clause (l)(1) ("Outstanding Gas Transactions") shall be Transactions and shall be subject to the terms and conditions of this Agreement upon effectiveness of this Gas Annex, unless otherwise agreed in writing by the parties with respect to one or more specific Outstanding Gas Transactions. All confirmations evidencing such Outstanding Gas Transactions shall constitute "Confirmations" within the meaning of this Agreement that supplement, form part of and are subject to this Agreement. If any confirmation issued or entered into with respect to one or more Outstanding Gas Transactions pursuant to the terms of a master agreement or in a form that contains provisions that are not directly related to the commercial terms of the Transaction and that are inconsistent with or duplicative of the terms and conditions of this Agreement (such master agreement or the portion of such Confirmation containing such non-commercial terms being referred to herein as the "Prior Master Agreement"), then, notwithstanding any provision of this Agreement to the contrary, the terms of the Schedule and the pre-printed form of this Agreement shall automatically supersede such Prior Master Agreement effective upon the effectiveness of this Gas Annex.

(iii) ***Credit Support Documents***. If elected under clause (l) as being applicable:

(A) *Outstanding Gas Credit Support.* The parties agree that to the extent any collateral, margin, security or other similar form of credit support (such credit support, excluding guarantees, being referred to herein as "Outstanding Gas Credit Support") is held by a party in connection with the obligations of the other party under Outstanding Gas Transactions, such Outstanding Gas Credit Support shall be deemed to have been delivered in respect of the obligations of the other party under and in connection with this Agreement.

The parties further agree that with respect to any Outstanding Gas Credit Support that (x) if the parties have entered into a Credit Support Document in connection with this Agreement that governs the provision of collateral, margin, security or other similar form of credit support (such Credit Support Document, an "Existing ISDA Credit Support Document") then the Outstanding Gas Credit Support shall be deemed to constitute credit support provided under such Existing ISDA Credit Support Document and such Existing ISDA Credit Support Document shall automatically supersede any agreement between the parties pursuant to which the Outstanding Gas Credit Support was provided (the "Outstanding Gas Credit Support Document") effective as of the date agreed by the parties and (y) if the parties have not entered into an Existing ISDA Credit Support Document, then the Outstanding Gas Credit Support Document constitutes a Credit Support Document with respect to the party that provided such credit support.

(B) *Amendments/Guaranties*. The parties agree that they will enter into such amendments to any Outstanding Gas Credit Support Document as may be necessary to give effect to the terms of this clause (a)(iii). To the extent that a guaranty was delivered in connection with a party's obligations under Outstanding Gas Transactions or a Prior Master Agreement, that party represents and warrants that any amendments necessary to ensure that the guaranty would extend to Transactions subject to this Agreement have been made prior to the effectiveness of this Gas Annex and agrees (x) that such guaranty constitutes a Credit Support Document with respect to the obligations of such party and (y) the guarantor under such guaranty constitutes a Credit Support Provider with respect to the obligations of such party.

(b) Performance Obligation

(i) Seller agrees to sell and deliver, and Buyer agrees to receive and purchase, the Contract Quantity for a particular Gas Transaction in accordance with the terms of this Gas Annex. Sales and purchases will be on a Firm or Interruptible basis, as agreed to by the parties in a Gas Transaction.

(ii) The remedy for the breach of a Firm obligation by a party shall be determined pursuant to the option below that the parties select in clause (l)(3):

Option A ***Cover Standard***: The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the positive difference, if any, between the purchase price paid by Buyer utilizing the Cover Standard and the Contract Price, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually delivered by Seller for such Day(s); or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in the amount equal to the positive difference, if any, between the Contract Price and the price received by Seller utilizing the Cover Standard for the resale of such Gas, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually taken by Buyer for such Day(s); or (iii) in the event that Buyer has used commercially reasonable efforts to replace the Gas or Seller has used commercially reasonable efforts to sell the Gas to a third party, and no such replacement or sale is available, then the sole and exclusive remedy of the performing party shall be any unfavorable difference between the Contract Price and the Spot Price, adjusted for such transportation to the applicable Delivery Point, multiplied by the difference between the Contract Quantity and the quantity actually delivered by Seller and received by Buyer for such Day(s). Imbalance Charges shall not be recovered under this clause (b)(ii), but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in clause (c)(iii) of this Gas Annex. The amount of such unfavorable difference shall be payable five Local Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.

Option B ***Spot Price Standard***: The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the Contract Price from the Spot Price; or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the applicable Spot Price from the Contract Price. Imbalance Charges shall not be recovered under this clause (b)(ii), but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in clause (c)(iii) of this Gas Annex. The amount of such unfavorable difference shall be payable five Local Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.

(iii) Notwithstanding clause (b)(ii) of this Gas Annex, the parties may agree to Alternative Damages in a Confirmation executed in writing by both parties.

(c) Transportation, Nominations and Imbalances

(i) Seller shall have the sole responsibility for transporting the Gas to the Delivery Point(s). Buyer shall have the sole responsibility for transporting the Gas from the Delivery Point(s).

(ii) The parties shall coordinate their nomination activities, giving sufficient time to meet the deadlines of the affected Transporter(s). Each party shall give the other party timely prior notice, sufficient to meet the requirements of all Transporter(s) involved in the Gas Transaction, of the quantities of Gas to be delivered and purchased each Day. Should either party become aware that actual deliveries at the Delivery Point(s) are greater or lesser than the Scheduled Gas, such party shall promptly notify the other party.

(iii) The parties shall use commercially reasonable efforts to avoid imposition of any Imbalance Charges. If Buyer or Seller receives an invoice from a Transporter that includes Imbalance Charges, the parties shall determine the validity as well as the cause of such Imbalance Charges. If the Imbalance Charges were incurred as a result of Buyer's receipt of quantities of Gas greater than or less than the Scheduled Gas, then Buyer shall pay for such Imbalance Charges or reimburse Seller for such Imbalance Charges paid by Seller. If the Imbalance Charges were incurred as a result of Seller's delivery of quantities of Gas greater than or less than the Scheduled Gas, then Seller shall pay for such Imbalance Charges or reimburse Buyer for such Imbalance Charges paid by Buyer. "Unpaid Amounts" as defined in Section 14 of this Agreement shall include unpaid Imbalance Charges, if any.

(d) Quality and Measurement

All Gas delivered by Seller shall meet the pressure, quality and heat content requirements of the Receiving Transporter. The unit of quantity measurement for purposes of Gas Transactions shall be one MMBtu dry. Measurement of Gas quantities hereunder shall be in accordance with the established procedures of the Receiving Transporter.

(e) Taxes

The Taxes payable by a party shall be determined pursuant to the option below that the parties select in clause (l)(4):

Option A: ***Buyer Pays At and After Delivery Point***: Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas at the Delivery Point(s) and all Taxes after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

Option B: ***Seller Pays Before and At Delivery Point***. Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s) and all Taxes at the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

(f) Billing, Payment and Audit

(i) Seller shall invoice Buyer for Gas delivered and received in the preceding Month and for any other applicable charges, providing supporting documentation acceptable in industry practice to support the amount charged. If the actual quantity delivered is not known by the billing date, billing will be prepared based on the quantity of Scheduled Gas. The invoiced quantity will then be adjusted to the actual quantity on the following Month's billing or as soon thereafter as actual delivery information is available.

(ii) Buyer shall remit the amount due under clause (f)(i) of this Gas Annex, in immediately available funds to the account specified from time to time by Seller, on or before the Payment Date elected in clause (l)(5) of this Gas Annex. In the event any payments are due Buyer hereunder, payment to Buyer shall be made in accordance with this clause (f)(ii).

(iii) In the event payments become due pursuant to clauses (b)(ii) or (b)(iii) of this Gas Annex, the performing party may submit an invoice to the nonperforming party for an accelerated payment setting forth the basis upon which the invoiced amount was calculated. Payment from the nonperforming party will be due five Local Business Days after receipt of invoice.

(iv) If the invoiced party, in good faith, disputes the amount of any such invoice or any part thereof, such invoiced party will pay such amount as it concedes to be correct; provided, however, if the invoiced party disputes the amount due, it must provide supporting documentation acceptable in industry practice to support the amount paid or disputed. In the event the parties are unable to resolve such dispute, either party may pursue any remedy available at law or in equity to enforce its rights pursuant to this clause (f).

(v) A party shall have the right, at its own expense, upon reasonable notice and at reasonable times, to examine and audit and to obtain copies of the relevant portion of the books, records, and telephone recordings of the other party only to the extent reasonably necessary to verify the accuracy of any statement, charge, payment, or computation made under this Gas Annex. This right to examine, audit, and to obtain copies shall not be available with respect to proprietary information not directly relevant to Gas Transactions under this Gas Annex. All invoices and billings shall be conclusively presumed final and accurate and all associated claims for under- or overpayments shall be deemed waived unless such invoices or billings are objected to in writing, with adequate explanation and/or documentation, within two years after the Month of Gas delivery. All retroactive adjustments under clause (f) of this Gas Annex shall be paid in full by the party owing payment within 30 Days of notice and substantiation of such inaccuracy.

(g) Title, Warranty and Indemnity

(i) Unless otherwise specifically agreed, title to the Gas shall pass from Seller to Buyer at the Delivery Point(s). Seller shall have responsibility for and assume any liability with respect to the Gas prior to its delivery to Buyer at the specified Delivery Point(s). Buyer shall have responsibility for and assume any liability with respect to said Gas after its delivery to Buyer at the Delivery Point(s).

(ii) Seller warrants that it will have the right to convey and will transfer good and merchantable title to all Gas sold hereunder and delivered by it to Buyer, free and clear of all liens, encumbrances, and claims. EXCEPT AS PROVIDED IN THIS CLAUSE (g)(ii), ALL OTHER WARRANTIES WITH RESPECT TO GAS, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE, ARE DISCLAIMED.

(iii) Seller agrees to indemnify Buyer and save it harmless from all losses, liabilities or claims including reasonable attorneys' fees and costs of court (“Claims”), from any and all persons, arising from or out of claims of title, personal injury or property damage from said Gas or other charges thereon which attach before title passes to Buyer. Buyer agrees to indemnify Seller and save it harmless from all Claims, from any and all persons, arising from or out of claims regarding payment, personal injury or property damage from said Gas or other charges thereon which attach after title passes to Buyer.

(iv) Notwithstanding the other provisions of this clause (g) of this Gas Annex, as between Seller and Buyer, Seller will be liable for all Claims to the extent that such arise from the failure of Gas delivered by Seller to meet the quality requirements of clause (d) of this Gas Annex.

(h) Force Majeure

(i) Except with regard to a party's obligation to make payment(s) due under clause (f) of this Gas Annex, Section 6 (e) of this Agreement and Imbalance Charges under clause (c)(iii) of this Gas Annex, neither party shall be liable to the other for failure to perform a Firm obligation, to the extent such failure was caused by Force Majeure. The term “Force Majeure” as employed herein means any cause not reasonably within the control of the party claiming suspension, as further defined in clause (h)(ii) of this Gas Annex.

(ii) Force Majeure shall include, but not be limited to, the following: (A) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (B) weather related events affecting an entire geographic region, such as low temperatures which cause freezing or failure of wells or lines of pipe; (C) interruption and/or curtailment of Firm transportation and/or storage by Transporters; (D) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars; and (E) governmental actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction. Seller and Buyer shall make reasonable efforts to avoid the adverse impacts of a Force Majeure and to resolve the event or occurrence once it has occurred in order to resume performance.

(iii) Neither party shall be entitled to the benefit of the provisions of Force Majeure to the extent performance is affected by any or all of the following circumstances: (A) the curtailment of interruptible or secondary Firm transportation unless primary, in-path, Firm transportation is also curtailed; (B) the party claiming excuse failed to remedy the condition and to resume the performance of such covenants or obligations with reasonable dispatch; or (C) economic hardship, to include, without limitation, Seller's ability to sell Gas at a higher or more advantageous price than the Contract Price, Buyer's ability to purchase Gas at a lower or more advantageous price than the Contract Price, or a regulatory agency disallowing, in whole or in part, the pass through of costs resulting from this Agreement; (D) the loss of Buyer's market(s) or Buyer's inability to use or resell Gas purchased hereunder, except, in either case, as provided in clause (h)(ii) of this Gas Annex; (E) the loss or failure of Seller's gas supply or depletion of reserves, except, in either case, as provided in clause (h)(ii) of this Gas Annex. The party claiming Force Majeure shall not be excused from its responsibility for Imbalance Charges.

(iv) Notwithstanding anything to the contrary herein, the parties agree that the settlement of strikes, lockouts or other industrial disturbances shall be within the sole discretion of the party experiencing such disturbance.

(v) The party whose performance is prevented by Force Majeure must provide notice to the other party. Initial notice may be given orally; however, written notice with reasonably full particulars of the event or occurrence is required as soon as reasonably possible. Upon providing written notice of Force Majeure to the other party, the affected party will be relieved of its obligation, from the onset of the Force Majeure event, to make or accept delivery of Gas, as applicable, to the extent and for the duration of Force Majeure, and neither party shall be deemed to have failed in such obligations to the other during such occurrence or event.

(vi) Notwithstanding clauses (h)(ii) and (h)(iii) of this Gas Annex, the parties may agree to alternative Force Majeure provisions in a Confirmation executed in writing by both parties.

If the pre-printed form portion of this Agreement is the 2002 ISDA Master Agreement form, Section 5(b)(ii) of this Agreement shall not apply to any Gas Transaction.

(i) Limitation of Liability

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY. A PARTY'S LIABILITY HEREUNDER SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN OR IN A GAS TRANSACTION, A PARTY'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY. SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY

DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

(j) Certain Amendments to this Agreement for Gas Transactions

(i) *Section 5(a)(i).* With respect to all Gas Transactions, the words "or delivery under Section 2(a)(i) or 2(e)" in the second line of Section 5(a)(i) of this Agreement and, if the pre-printed form portion of this Agreement is the 2002 ISDA Master Agreement form, the words "or the first Local Delivery Day in the case of any such delivery" and ", in each case," in the third and fourth lines of Section 5(a)(i) of this Agreement, are hereby deleted.

(ii) *Section 5(a)(ii).* With respect to all Gas Transactions, the words "or delivery under Section 2(a)(i) or 2(e)" in the second line of Section 5(a)(ii) are hereby deleted and the words "or to deliver or receive Gas, the exclusive remedy for which is provided in clause (b)(ii) of the Gas Annex to the Schedule" are hereby added at the end of the parenthetical of Section 5(a)(ii) if the pre-printed form portion of this Agreement is the 1992 ISDA Master Agreement form or Section 5(a)(ii)(1) if the pre-printed form portion of this Agreement is the 2002 ISDA Master Agreement form.

(iii) *Section 5(a)(v).* With respect to all Gas Transactions, (A) if the pre-printed form portion of this Agreement is the 1992 ISDA Master Agreement, the parenthetical "(other than by failing to make a delivery)" is inserted after the word "defaults" in clause (1) of Section 5(a)(v) and the words "or delivery" in clause (2) of Section 5(a)(v) of this Agreement are deleted; and (B) if the pre-printed form portion of this Agreement is the 2002 ISDA Master Agreement, the words "(including any delivery due on the last delivery or exchange date of) a Specified Transaction or" in clause (3) of Section 5(a)(v) of this Agreement are deleted.

(k) Definitions. For purposes of this Gas Annex, the following definitions apply:

(i) "Alternative Damages" shall mean such damages, expressed in dollars or dollars per MMBtu, as the parties shall agree upon in the Transaction Confirmation, in the event either Seller or Buyer fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer.

(ii) "British thermal unit" or "Btu" shall mean the International BTU, which is also called the Btu (IT).

(iii) "Buyer" shall mean the party receiving Gas under a Gas Transaction.

(iv) "Contract Price" shall mean the amount expressed in U.S. Dollars per MMBtu to be paid by Buyer to Seller for the purchase of Gas as agreed to by the parties in a Gas Transaction.

(v) "Contract Quantity" shall mean the quantity of Gas to be delivered and taken as agreed to by the parties in a Gas Transaction.

(vi) "Cover Standard" shall mean that if there is an unexcused failure to take or deliver any quantity of Gas pursuant to this Gas Annex, then the performing party shall use commercially reasonable efforts to (i) if Buyer is the performing party, obtain Gas, (or an alternate fuel if elected by Buyer and replacement Gas is not available),or (ii) if Seller is the performing party, sell Gas, in either case, at a price reasonable for the delivery or production area, as applicable, consistent with: the amount of notice provided by the nonperforming party; the immediacy of the Buyer's Gas consumption needs or Seller's Gas sales requirements, as applicable; the quantities involved; and the anticipated length of failure by the nonperforming party.

(vii) "Day" shall mean a period of 24 consecutive hours, coextensive with a "day" as defined by the Receiving Transporter in a particular transaction.

(viii) "Delivery Period" shall be the period during which deliveries are to be made as agreed to by the parties in a Gas Transaction.

(ix) "Delivery Point(s)" shall mean such point(s) as are agreed to by the parties in a Gas Transaction.

(x) "EFP" shall mean, when used in a Confirmation of a Gas Transaction, the purchase, sale or exchange of natural Gas as the "physical" side of an exchange for physical transaction involving gas futures contracts. EFP shall incorporate the meaning and remedies of "Firm", provided that a party's excuse for nonperformance of its obligations to deliver or receive Gas will be governed by the rules of the relevant futures exchange regulated under the U.S. Commodity Exchange Act (7 U.S. Code 1, as amended).

(xi) "Firm" shall mean that either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of Force Majeure; provided, however, that during Force Majeure interruptions, the party invoking Force Majeure may be responsible for any Imbalance Charges as set forth in clause (c)(iii) of this Gas Annex related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by the Transporter.

(xii) "Gas" shall mean any mixture of hydrocarbons and noncombustible gases in a gaseous state consisting primarily of methane.

(xiii) "Imbalance Charges" shall mean any fees, penalties, costs or charges (in cash or in kind) assessed by a Transporter for failure to satisfy the Transporter's balance and/or nomination requirements.

(xiv) "Interruptible" shall mean that either party may interrupt its performance at any time for any reason, whether or not caused by an event of Force Majeure, with no liability, except such interrupting party may be responsible for any Imbalance Charges as set forth in clause (c)(iii) of this Gas Annex related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by Transporter.

(xv) "MMBtu" shall mean one million British thermal units, which is equivalent to one dekatherm.

(xvi) "Month" shall mean the period beginning on the first Day of the calendar month and ending immediately prior to the commencement of the first Day of the next calendar month.

(xvii) "Payment Date" shall mean the payment date for Gas Transactions under this Gas Annex, as specified in clause (l)(5) of this Gas Annex.

(xviii) "Receiving Transporter" shall mean the Transporter receiving Gas at a Delivery Point, or absent such receiving Transporter, the Transporter delivering Gas at a Delivery Point.

(xix) "Scheduled Gas" shall mean the quantity of Gas confirmed by Transporter(s) for movement, transportation or management.

(xx) "Seller" means the party delivering Gas under a Gas Transaction.

(xxi) "Spot Price" as referred to in clause (b)(ii) of this Gas Annex shall mean the price published as the Spot Price Index for the relevant Day; provided, if there is no single price published as the Spot Price Index for such location for such Day, but there is published a range of prices, then the Spot Price shall be the average of such high and low prices. If no price or range of prices is published for such Day, then the Spot Price shall be the average of the following: (i) the price (determined as stated above) for the first Day for which a price or range of prices is published that next precedes the relevant Day; and (ii) the price (determined as stated above) for the first Day for which a price or range of prices is published that next follows the relevant Day.

(xxii) "Spot Price Index" shall mean, with respect to a Gas Transaction, unless otherwise specified in the Confirmation for that Transaction, the "Daily Midpoint" price set forth in Gas Daily (published by Platts), or any successor publication, in the column "Daily Price Survey" under the listing applicable to the geographic location closest in proximity to the Delivery Point(s) for the relevant Day or, if an alternative index or price is specified in clause (l)(6) below, such alternative index or price.

(xxiii) "Transporter(s)" shall mean all Gas gathering or pipeline companies, or local distribution companies, acting in the capacity of a transporter, transporting Gas for Seller or Buyer upstream or downstream, respectively, of the Delivery Point pursuant to a particular Gas Transaction.

(l) Elective Provisions

1. (a)(ii) – Outstanding Gas Transactions. This Gas Annex shall apply to the following pre-existing Gas Transactions pursuant to clause (a)(ii):

___ Option A: All Gas Transactions outstanding between the parties as of the date this Gas Annex becomes effective.

___ Option B: The Gas Transactions listed in Schedule 1 to this Gas Annex.

___ Option C: None of the Gas Transactions between the parties that were executed prior to the date this Gas Annex becomes effective.

If none of the above options is selected, Option A shall apply.

2. (a)(iii) – Outstanding Gas Credit Support. Outstanding Gas Credit Support held by a party in connection with Outstanding Gas Transactions shall be deemed to have been delivered under and in connection with this Agreement pursuant to clause (a)(iii). If not checked, not applicable.

3. (b)(ii) – Performance Obligation (remedy for breach of Firm obligation)

___ Option A: Cover Standard

___ Option B: Spot Price Standard

If neither option is selected, Option A shall apply.

4. (e) – Taxes

___ Option A: Buyer Pays At and After Delivery Point

___ Option B: Seller Pays Before and At Deliver Point

If neither option is selected, Option A shall apply.

5. (f)(ii) – Payment Date

____ Option A: the later of the 25th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

____ Option B: the later of the ___ Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

____ Option C: Notwithstanding anything to the contrary in the Schedule, payments with respect to both Gas Transactions and Power Transactions (as defined separately in the Schedule) will be netted and payable on or before the later of the 20th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

____ Option D: Notwithstanding anything to the contrary in the Schedule, payments with respect to both Gas Transactions and Power Transactions (as defined separately in the Schedule) will be netted and payable on or before the later of the 25th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

If none of the above options is selected, Option A shall apply.

6. (k)(xxii) – Alternative to Spot Price Index. The parties have selected the following alternative index as the Spot Price Index: _____. If no index is specified, the Spot Price Index specified in clause (l)(xxi) applies.

(m) Notices for Gas Transactions

PARTY A
Invoices:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Nominations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Confirmations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Option Exercise:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

□Wire Transfer - or - □ACH (check one box):
Bank: _____
ABA: _____
Account: _____
Other Details: _____

PARTY B
Invoices:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Nominations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Confirmations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

Option Exercise:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: _____
Phone: _____
Facsimile: _____

□Wire Transfer - or - □ACH (check one box):
Bank: _____
ABA: _____
Account: _____
Other Details: _____

(n) Other Provisions/Modifications to this Gas Annex.

USER'S GUIDE

for the

Model ISDA Gas Annex (Gas Annex)

to the

International Swaps and Derivatives Association, Inc.'s (ISDA)
Master Agreements [1992 and 2002]

October 2004

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Introduction and DISCLAIMER

This Model International Swaps and Derivatives Association, Inc.'s (ISDA) Gas Annex to ISDA's Master Agreement (1992 or 2002 version) and User's Guide was developed using the North American Energy Standards Board, Inc.'s (NAESB) processes for development of standards, models or interpretations. The NAESB development process is open to all participants, members and non-members.

NAESB DISCLAIMER:

THIS ISDA GAS ANNEX (GAS ANNEX) AND THIS USER'S GUIDE WERE DEVELOPED BY THE WHOLESALE GAS QUADRANT (WGQ) OF THE NORTH AMERICAN ENERGY STANDARDS BOARD, INC. (NAESB) AND ITS SUBCOMMITTEES AND ARE PROVIDED FOR THE CONVENIENCE OF NAESB MEMBERS AND ANY OTHER THIRD PARTIES. THE GAS ANNEX AND THE USER'S GUIDE DO NOT REFLECT ANY POLICY ADOPTED BY NAESB OR ITS MEMBERS AND ARE INTENDED TO PROVIDE MODEL FORM OF A GAS ANNEX AS A POSSIBLE STARTING POINT FOR PARTIES' NEGOTIATIONS. PARTIES MAY USE OTHER FORMS OF DOCUMENTS FOR THIS PURPOSE AND ARE NOT REQUIRED TO USE THIS MODEL FORM. PARTIES ARE FREE TO MODIFY THE GAS ANNEX FORM FOR THEIR OWN USE. NAESB DOES NOT WARRANT THE LEGAL EFFICACY OF THE GAS ANNEX OR THE USER'S GUIDE; NOR SHALL THE PROVISIONS OF THESE MODEL FORMS CONSTITUTE THE GIVING OF LEGAL ADVICE.

PARTIES ARE ADVISED TO CONSULT WITH THEIR OWN LEGAL COUNSEL TO OBTAIN ADVICE CONCERNING USE OF THESE MODEL FORMS AND OTHERWISE TO ASSURE THE EFFICACY OF ANY ARRANGEMENTS THEY MAY MAKE.

Purpose

The Gas Annex is proposed to be an annex to an ISDA Master Agreement (1992 or 2002 version).

During the development of the Gas Annex by members of the NAESB WGQ Contracts Subcommittee, members that expressed interest in proceeding with the development of the Gas Annex offered the following information to support the Gas Annex development and its use.

1. Gas Annex should be a starting point for negotiation of a Gas Annex to the ISDA Master Agreement between counterparties.
2. Gas Annex provides a basis for performing physical trading of natural gas between counterparties under an ISDA Master Agreement.
3. Gas Annex and the User's Guide will provide each party with a check-list of terms and conditions that could be included in a Model Gas Annex or in the associated Confirmations related to physical trading of natural gas between the counterparties that should minimize the risk of a key term(s) being omitted.
4. Gas Annex should expedite the negotiation of the final document(s).

Generally, no members expressed concerns on the Gas Annex as developed or its use, except to the extent that the Gas Annex may need to be amended by special provisions to incorporate the counterparties understanding and agreements underlying the incorporation of the Gas Annex to the applicable ISDA Master Agreement.

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Model ISDA Gas Annex (Gas Annex) structure

The structure of the Gas Annex is an optional annex to be incorporated into an existing ISDA Master Agreement between counterparties for the purpose of conducting physical trading of natural gas under the ISDA Master Agreement. The Gas Annex is also designed to be executed concurrently with a new ISDA Master Agreement between counterparties. If parties would like to incorporate a Gas Annex to an ISDA Master Agreement they should consider using the following conventions and special provisions:

1. ISDA Gas Annex should be a preprinted form similar to NAESB's Base Contract.

   NAESB members strongly recommend that ISDA use a preprinted form for the Gas Annex where any changes would be memorialized in a separate special provisions attachment to the Gas Annex. This procedure should greatly assist the counterparties in their review, negotiation and execution of a Gas Annex.

2. NAESB Forward Contract Language:

   NAESB Base Contract Section 10.5 provides:

   "The parties agree that the transactions hereunder constitute a "forward contract" within the meaning of the United States Bankruptcy Code and that Buyer and Seller are each "forward contract merchants" within the meaning of the United States Bankruptcy Code."

   Parties may want to consider adding this language to the Schedule, the Gas Annex under Paragraph (a) or the Confirmation between counterparties for physical trading of natural gas.

3. NAESB Base Contract Confirmation Process:

   NAESB Base Contract Sections 1.1 and 1.2 provides for oral and written procedures for natural gas trading confirmations under the NAESB Base Contract.

   The ISDA Master Agreement provides for oral or written Confirmations, parties may want to consider adding NAESB language for written confirmations to the Schedule, the Gas Annex under Paragraph (a) or the Confirmation between counterparties for physical trading of natural gas.

4. "Adequate Assurance" is included in the NAESB Base Contract but is not included in the Gas Annex.

   NAESB members very strongly recommend that counterparties wanting to maintain the level of "adequate assurance" of the NAESB Base Contract include the following language as a special provision to the Gas Annex.

   "If either party ("X") has reasonable grounds for insecurity regarding the performance of any obligation under this Contract (whether or not then due) by the other party ("Y") (including, without limitation, the occurrence of a material change in the creditworthiness of Y), X may demand Adequate Assurance of Performance. For purposes of Section 5(a)(iii)(1) of this Agreement, an Event of Default will exist with respect to Y if Y fails to give Adequate Assurance of Performance to X within 48 hours but at least one Business Day of a written request by the other party. "Adequate Assurance of Performance" shall mean sufficient security in the form, amount and for the term reasonably acceptable to X, including, but not limited to, a standby irrevocable letter of credit, a prepayment, a security interest in an asset or a performance bond or guaranty (including the issuer of any such security)."

5. Gas Annex Paragraph (b) [**Performance Obligations**]:

   The ISDA Master Agreement has a 30 day grace period for involuntary bankruptcies. Counterparties that believe that this grace period should not be applicable to physical natural gas transactions should include a special provision in their confirmations to delete or reduce this grace period as it may apply to Gas Transactions. NAESB members noted that a 30-day grace

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period is especially problematic for physical transactions where a party should not be in a position of having to deliver a physical commodity to a bankrupt party.

6. Gas Annex Paragraph (b) [**Performance Obligations**]:

   NAESB Base Contract Section 3.4 provides for a Termination Option. Counterparties may want to consider adding the following provision to Paragraph 9b) of the Gas Annex or similar provision in the Confirmation between the counterparties.

   "(iv) In addition to clauses (b)(ii) and (b)(iii) of the Gas Annex, the parties may provide for a Termination Option in a Confirmation executed in writing by both parties. The Confirmation containing the Termination Option will designate the length of nonperformance triggering the Termination Option and the procedures for exercise thereof, how damages for nonperformance will be compensated, and how liquidation costs will be calculated."

   If such provision is added to the Gas Annex, counterparties should also include the definition noted below.

   " "Termination Option" shall mean the option of either party to terminate a Gas Transaction in the event that the other party fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer for a designated number of days during a period as specified on the applicable Confirmation."

7. Gas Annex Paragraph (f) [**Billing, Payment and Audit**];

   NAESB Base Contract Section 7.7 provides for netting of transactions as noted below.

   "7.7 Unless the parties have elected on the Base Contract not to make this Section 7.7 applicable to this Contract, the parties shall net all undisputed amounts due and owing, and/or past due, arising under the Contract such that the party owing the greater amount shall make a single payment of the net amount to the other party in accordance with Section 7; provided that no payment required to be made pursuant to the terms of any Credit Support Obligation or pursuant to Section 7.3 shall be subject to netting under this Section. If the parties have executed a separate netting agreement, the terms and conditions therein shall prevail to the extent inconsistent herewith."

   Section 2(c) of the ISDA Master Agreement addresses netting of Transactions under the Gas Annex. Parties may want to consider alternative language to reflect different netting arrangements for Gas Transactions.

8. Mobile-Sierra Provision under Gas Annex Paragraph (j) [**Certain Amendments to this Agreement for Gas Transactions**]:

   In the event one or more of the parties to a Gas Transaction is subject to FERC jurisdiction for such Gas Transactions under the Natural Gas Act or is required to file its prices with a agency having jurisdiction over prices under a Gas transaction, parties may want to consider adding the following language as a new subparagraph under Paragraph (j) to the Gas Annex as a special provision to address concerns on price regulation.

   "Mobile-Sierra. Each party irrevocably waives its rights, including its rights under §§ 4-5 of the Natural Gas Act, unilaterally to seek or support a change in the rate(s), charges, classifications, terms or conditions of any Gas Transaction hereunder or any other agreements entered into in connection with Gas Transactions under this Agreement. By this provision, each party expressly waives its right to seek or support: (i) an order from the U.S. Federal Energy Regulatory Commission finding that the market-based rate(s), charges, classifications, terms or conditions agreed to by the parties under this Agreement with respect to Gas Transactions are unjust and unreasonable; or (ii) any refund with respect thereto. Each party agrees not to make or support such a filing or request, and that these covenants and waivers shall be binding notwithstanding any regulatory or market changes that may occur hereafter."

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Wholesale Gas Quadrant

TAB 20

Proposed Standards – AP2004#7– EDM Standards

North American Energy Standards Board
1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

via email and posting

TO:	NAESB WGQ Members and Interested Industry Participants
FROM:	Todd Oncken, Deputy Director
RE:	Wholesale Gas Quadrant Request for Comments
DATE:	October 13, 2004

An industry comment period begins October 13, 2004 and ends on November 12 for the WGQ Electronic Delivery Mechanism recommendation related to Wholesale Gas Quadrant Annual Plan Item 7 (http://www.naesb.org/pdf/2004_wgq_ap7.doc, http://www.naesb.org/pdf/2004_wgq_ap7_attach.doc). All interested parties, regardless of membership status within NAESB are eligible to submit comments for consideration. The WGQ Executive Committee will meet in Washington, DC on November 18 to review this recommendation and consider it for vote as a NAESB Wholesale Gas Quadrant (WGQ) standard, and in that consideration will review all submitted comments.

The recommendation reflects standards that address the adoption of the WGQ EDM Manual that would replace the WGQ Electronic Delivery Mechanism (EDM) Manual.

All comments received by the NAESB office by end of business on November 12 will be posted on the Home Page (http://www.naesb.org/request.asp) and forwarded to the WGQ EC members for their consideration. If you have difficulty downloading the recommendation, please call the NAESB office at (713) 356-0060. The recommendation is also attached for your convenience.

Best Regards,

Todd Oncken

cc: Rae McQuade, Executive Director

North American Energy Standards Board
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NAESB Wholesale Gas Quadrant Member Roster
October 13, 2004

Organization	Segment	Member Contact
8760	s	Jim Buccigross
AEP Energy Services, Inc.	s	Cathy Szasz
Ameren Corporation	1	Scott Glaeser
Apache Corporation	pr	Michele Markey
Arizona Public Service Company	e	Gary Duede Kelly Daly Curt Brechtel
Ballard Natural Gas, LLC	s	Susan Thibodeaux
Baltimore Gas & Electric Co.	1	Steven Zavodnick
Barclays Bank PLC	s	Frank Rodriguez
BG LNG Services, LLC	s	Martha Braddy
Boeing Company, The	e	Tina Burnett
BP Energy	pr	Bill Benham Lauren Kaestner
Bridgeline Gas Marketing	pl	Georgia Blanchard
Burlington Resources	pr	Paul Keeler
Calpine Energy Services, LP	e	Janet Dixon Craig Chancellor
Cargill Incorporated	s	Kathy Gerken
Cascade Natural Gas Corporation	1	Mark Sellers-Vaughn
CenterPoint Energy Gas Services, Inc.	s	James G. Beste
CenterPoint Energy Gas Transmission Company	pl	Larry Thomas
CenterPoint Energy Mississippi River Transmission Corp.	pl	Robert Trost
Chevron/Texaco	pr	Randy Mills
Cinergy	e	John Procario
Cinergy Marketing and Trading	s	Randy Bevis
Columbia Gas Transmission	pl	Carl Levander
Columbia Gulf Transmission Co.	pl	Carl Levander
Comprehensive Energy Services	e	Jim Templeton
ConocoPhillips Gas and Power	pr	Peter Frost
Consolidated Edison Company of NY	1	Mary Jane McCartney Jim Stanzione
Constellation Power Source, Inc.	s	Robert McKay
Dauphin Island Gathering Partners	pl	Katie Rice
Defense Energy Support Center	e	Veronica Jones Jacob Moser
Department of Energy	e	Christopher Freitas
Dominion Exploration and Production, Inc.	pr	David Ogden Gary Weaver Sheri Heslington
Dominion Resources	1	Craig Colombo

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NAESB Wholesale Gas Quadrant Member Roster
October 13, 2004

Organization	Segment	Member Contact
Dominion Transmission, Inc.	pl	Gary Sypolt Iris King
Duke Energy Gas Transmission - Texas Eastern	pl	Richard Kruse
Edison Mission Marketing and Trade	e	Christian Hnat William Roberts
El Paso Eastern Pipelines	pl	Larry Smith Mark Gracey
El Paso Natural Gas	pl	William Griffith
El Paso Production Company	pr	Bill Hebenstreit
Enbridge Energy Company, Inc.	pl	Terry McGill
EnCana Corporation	pr	Keith Sappenfield
EnCana Marketing (USA) Inc.	s	Keith Sappenfield
Energy East Management Corporation	l	Marjorie Perlman
Energy Velocity	s	Konni Keuter
Entergy Services, Inc.	e	Arlynn Kelleher Terry Shields
Equitable Gas Company	l	Steve Rafferty
Equitrans, L.P.	pl	Mina Speicher
ExxonMobil Gas Marketing	pr	Richard Smith Benjamin C. Harris
Florida Power & Light Company	e	Dona Gussow Joe Stepenovitch
Gas Transmission Northwest Corporation	pl	Jay Story
Great Lakes Gas Transmission	pl	Gene Fava
Group 8760	s	Jim Buccigross
Gulf South Pipeline	pl	Claire Burum Randy Young
H S Resources Inc.	pl	Carol Hall
Imperial Irrigation District	e	William Rapp
Iroquois Gas Transmission System	pl	Tom Gwilliam
Kern River Gas Transmission Company	pl	Janie Nielsen
KeySpan Energy	l	Dolores Chezar
Laclede Gas Co.	l	Kenneth Neises
Latitude Technologies	s	Leigh Spangler
Louis Dreyfus Energy Services L.P.	s	Mary Ellen Bell Ruby H. Melton
Lower Colorado River Authority	e	Mickey Bell
Marathon Oil Company	pr	Robin Perrine
Mewbourne Oil Company	pr	Michael F. Shepard
National Fuel Gas Distribution	l	Michael Novak
National Fuel Gas Supply Corp.	pl	Joseph Kardas
Natural Gas Pipeline Co of America	pl	Paul Love
Niagara Mohawk Power Corporation	l	Bruce Garcy
Nicor Gas	l	Nancy Brucher

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NAESB Wholesale Gas Quadrant Member Roster
October 13, 2004

Organization	Segment	Member Contact
NiSource Inc.	1	M. Christopher Maturo
Northern Natural Gas	pl	Mary Darveaux
Northwest Natural Gas Company	1	Randolph Friedman
NOVA Gas Transmission Ltd.	pl	Doug Miller
Occidental Energy Marketing Inc. (OEMI)	pr	Carol Wilson
Pacific Gas & Electric	1	John Breen
Panhandle Eastern Pipe Line	pl	Bill (William) Grygar Kim Van Pelt
PECO Energy Co.	1	Reed R. Horting Amy Hamilton
Pemex Gas Y Petroquimica Basica	s	Juan Enrique Gonzales Azuara
Peoples Gas Light & Coke Co.	1	George E. Rieger
Platts	s	Bill Murphy
Portland General Electric	pl	Kathy Davies
Portland Natural Gas Transmission System	pl	David Morgan
PPL EnergyPlus, LLC	e	Anne Lovett
PPM Energy, Inc.	e	Scott Hannigan
Prospect Energy	s	Lyn Maddox
Public Service Electric & Gas	1	David Wohlfarth
Questar Pipeline Co.	pl	Scott Hansen
Quorum Business Solutions Inc.	s	Douglas Allen
Reliant Energy Services, Inc.	e	Gary Hinners John Orr Janie Mitcham
Sabine Pipe Line LLC	pl	Jan Rogers
Salt River Project Agricultural Improvement & Power District	e	Diane McVicker
SCANA Corporation	pl	Jacquelyn Gettle
Sempra Energy - Southern California Gas Co.	1	Lee Stewart Rodger Schwecke
Sequent Energy Management, L.P.	s	Pat Metteauer
Shell Gas Transmission, LLC	pl	Chuck Cook
SolArc Inc.	s	Tim Curtis
Southern California Edison Company	e	Roman Bakke
Southern Company Services, Inc.	e	Carl Haga
Southern Natural Gas Co.	pl	Prince McDougal
Southern Star Central Gas Pipeline	pl	James L. Harder Dale Sanders
Southwest Gas Corporation	1	Larry Black
SunGard Energy Systems	s	Maria Onufrow Jennifer Chen
Telvent USA, Inc.	s	Glenn Irwin
Tennessee Valley Authority	e	Valerie Crockett

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NAESB Wholesale Gas Quadrant Member Roster
October 13, 2004

Organization	Segment	Member Contact
Texas Gas Transmission, LLC	pl	Jeff Bittel
Tiger Natural Gas	s	Tracy Phillips
Tractebel Energy Marketing, Inc.	s	Mark Hodges
TransCanada Pipelines	pl	Doug Miller
Transwestern Pipeline Co.	pl	Donna Scott
Trinity Apex Solutions, Inc.	s	Matt Armstrong
TXU Energy Trading Co.	s	Mike Grim
TXU Lone Star Pipeline Company	pl	Steve Easley
UBS Energy LLC	s	Suzanne Calcagno
Vector Pipeline L.P.	pl	Amy Bruhn
Washington Gas Light Co.	l	Adrian Chapman Tim Sherwood Jennifer Deegan
Westfield Gas & Electric Light Dept.	l	Joyce Bodak
Williams Gas Pipeline	pl	Dale Davis Ron Mucci
Williston Basin Interstate Pipeline	pl	Keith Tiggelaar
Wisconsin Public Service Corporation	l	Patrick Fox

Segment Legend:

e = End Users
l = LDCs
p = Pipeline
r = Producer
s = Services

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant:

Requesters: **WGQ EDM Subcommittee**
Request No.: **AP 7**
Request Title: **Preparation of QEDM for WGQ**

1. RECOMMENDED ACTION:

_X_ Accept as requested
___ Accept as modified below
___ Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

_X_ Change to Existing Practice
___ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:	**Per Recommendation:**
___ Initiation	___ Initiation
_X_ Modification	_X_ Modification
___ Interpretation	___ Interpretation
___ Withdrawal	___ Withdrawal
_X_ Principle	_X_ Principle
_X_ Definition	_X_ Definition
_X_ Business Practice Standard	_X_ Business Practice Standard
_X_ Document	_X_ Document
___ Data Element	___ Data Element
___ Code Value	___ Code Value
___ X12 Implementation Guide	___ X12 Implementation Guide
_X_ Business Process Documentation	_X_ Business Process Documentation

3. RECOMMENDATION

SUMMARY:

This recommendation proposes, as a result of the creation of the NAESB Internet Electronic Transport (Internet ET) specification, the adoption of the WGQ Quadrant EDM Manual as a replacement for the NAESB WGQ Electronic Delivery Mechanism (EDM) Manual. (Note: The NAESB Internet ET was adopted by the Executive Committees of the WGQ, REQ and RGQ in May, 2004).

Specifically, the WGQ EDM Subcommittee, working in conjunction with the NAESB Retail Quadrants TEIS Subcommittees, removed essentially all of "Tab 6" of the Version 1.7 WGQ EDM Manual and used it as the basis of the NAESB Internet ET document. Additionally, the encryption standards for PGP were modified to adopt OpenPGP and mutually agree to PGP. The remaining content of the WGQ EDM Manual, that is the subject of this recommendation, has been reviewed and revised for Internet ET conforming changes, content updates, grammatical improvements and overall streamlining of content.

This streamlined content is to be renamed the WGQ Quadrant Electronic Delivery Manual (QEDM) and be part of the Version 1.8 WGQ standards.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant:

Requesters: **WGQ EDM Subcommittee**
Request No.: **AP 7**
Request Title: **Preparation of QEDM for WGQ**

RECOMMENDED STANDARDS:

As a result of the above processes, the following NAESB WGQ Principles, Definitions, Standards and Interpretations are proposed to be changed, deleted and/or moved to the Internet ET specification:

4.1.2 The WGQ Quadrant Electronic Delivery Mechanism does not pick winners, rather it should create an environment where the marketplace can dictate a winner or winners.

4.1.6 Data providers (~~transportation service providers)~~Transportation Service Providers) should interface with third party vendors according to NAESB WGQ standards.

4.1.7 Electronic communications between parties ~~to the transaction~~ should be done on a nondiscriminatory basis, whether through an agent or directly with any party to the transaction.

~~4.1.9 Service providers should post clear and precise business processing rules at the designated site, or in writing, upon request.~~

4.2.11 "NAESB WGQ EDI/EDM" is the term used to describe ANSI ASC X12 computer-to-computer electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards in the NAESB WGQ Implementation Guides and communicated between trading partners over the Internet using the NAESB Internet Electronic Transport ~~WGQ Electronic Delivery Mechanism.~~

4.2.12 "NAESB WGQ FF/EDM" is the term used to describe a standardized flat file electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards. NAESB WGQ FF/EDM is communicated between trading partners over the Internet using the NAESB Internet Electronic Transport~~WGQ Electronic Delivery Mechanism~~.

4.2.13 "NAESB WGQ EBB/EDM" is the term used to describe the NAESB WGQ standardized electronic interchange of information for Customer Activities Internet Web site presentations. ~~NAESB WGQ EBB/EDM is communicated between trading partners over the Internet using the NAESB WGQ Electronic Delivery Mechanism for NAESB WGQ EBB/EDM~~

4.2.20 Testing data sets between trading partners includes testing of:
1. intended business results,
2. Internet ET~~proposed electronic delivery mechanisms~~, and
3. related EDI/EDM and, where supported, FF/EDM implementation issues.
Testing should include enveloping, security, data validity, and standards compliance (e.g. ANSI X12 and NAESB WGQ QEDM Related Standards).

4.3.1 All parties sending and receiving data should accept a TCP/IP connection. ~~Sending~~At a minimum, sending and receiving parties should designate an Internet address~~as a designated site~~ for the receipt and delivery of NAESB WGQ standardized data sets.

4.3.2 On time stamping, data leaves control of the originator by the same time (deadline), regardless of mechanism (3rd party service provider time stamp is acceptable) and 15 minutes of communication time should be available to allow accumulation of all transactions to the pipeline. ~~A standard network protocol (TCP/IP) should be in service for direct connect to the pipeline designated site.~~

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant:

Requesters: **WGQ EDM Subcommittee**
Request No.: **AP 7**
Request Title: **Preparation of QEDM for WGQ**

4.3.5 Documents that are made available on the Transportation Service Provider's Web ~~designated~~ site should be downloadable on demand in a NAESB WGQ specified electronic structure.

4.3.7 Deleted and moved to Internet ET standard [10].3.3.

4.3.8 Deleted and moved to Internet ET standard [10].3.4.

4.3.9 Deleted and moved to Internet ET standard [10].3.5-7.

4.3.10 Deleted, moved and modified as Internet ET standard [10].3.8.

4.3.11 Deleted, moved and modified as Internet ET standard [10].3.9.

4.3.12 Deleted and moved to Internet ET standard [10].3.10.

4.3.13 Deleted, moved and modified as Internet ET standard [10].3.11.

4.3.14 Deleted, moved and modified as Internet ET standard [10].3.14.

4.3.15 Deleted, moved and modified as Internet ET standard [10].3.15.

4.3.37 Deleted, moved and modified as Internet ET standard [10].3.20.

4.3.64 Deleted, moved and modified as Internet ET standard [10].3.22.

4.3.70 Deleted, moved and modified as Internet ET standard [10].3.23.

4.3.71 Deleted, moved and modified as Internet ET standard [10].3.24.

4.3.88 Deleted, moved and modified as Internet ET standard [10].3.25.

7.3.50 Moved to Internet ET.

Note: Changes for FERC Order 2004 and Gas Quality Reporting (R03035A) have already been incorporated in the proposed WGQ QEDM.

BUSINESS PROCESS DOCUMENTATION (for addition, modification or deletion of business process documentation language)

Standards Book: **WGQ – Electronic Delivery Mechanism**

Entire Manual: **Revised WGQ EDM manual to be now referred to as WGQ Quadrant Electronic Delivery Mechnism (QEDM)**
See attached - 84 pages (due to extensive changes, the redline copy is not easilly readable, see NAESB WGQ EDM website for the redline history)

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant:

Requesters: **WGQ EDM Subcommittee**
Request No.: **AP 7**
Request Title: **Preparation of QEDM for WGQ**

4. SUPPORTING DOCUMENTATION

a. Description of Request:

2004 Annual Plan Item 7: Prepare a common NAESB Electronic Transport (ET) and WGQ Quadrant Electronic Delivery Mechanism (WGQ QEDM) manuals using the version 1.6 NAESB WGQ EDM tab 6 and applicable 4.x.x standards as a base.

b. Description of Recommendation:

WGQ EDM Subcommittee:
See the WGQ EDM meeting minutes, and attachments for the supporting documentation, discussion, and voting records for the following dates:

04/13/2004
04/26/2004
05/18/2004
06/21/2004
07/20/2004
08/12/2004
09/20/2004
09/27/2004
10/01/2004
10/05/2004

For details regarding the creation of the NAESB Internet ET that has already been adopted by the NAESB Executive Committees, see WGQ EDM meeting materials prior to April 2004.

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EXECUTIVE SUMMARY

This North American Energy Standards Board (NAESB) Wholesale Gas Quadrant (WGQ) Quadrant Electronic Delivery Mechanism (QEDM) manual establishes the framework for the electronic dissemination and communication of information between parties in the North American Wholesale Gas marketplace. Specifically, the Wholesale Gas Quadrant of the North American Energy Standards Board has standardized five methods of communication that can be implemented by market participants. The five methods are:

1. EDI/EDM Transfer - The transfer of EDI files, as defined by the ANSI-based NAESB WGQ file formats standards, transferred via the Internet using the NAESB Internet Electronic Transport (Internet ET) mechanism.

2. FF/EDM Transfer - The transfer of "flat files", as defined by the NAESB WGQ file formats standards, transferred via the Internet using the NAESB Internet ET mechanism.

3. Informational Postings Web Sites - Internet web sites that provide open access to various documents and information posted by Transportation Service Providers.

4. EBB/EDM - Customer Activities Internet web sites that provide secure access to various documents, information and transactions between Transportation Service Providers and Service Requesters.

5. Interactive Flat File/EDM – The transfer of "flat files", as defined by the NAESB WGQ QEDM file format standards, using a secure web site.

For each of these five areas, this document provides a high-level guide to development, implementation, and testing. This guide is not intended to be a comprehensive, in-depth manual.

Open Standards

The “open” technology standards selected by NAESB WGQ are designed to provide flexibility and scalability. The business benefits gained from adherence to open standards are:

- Provides the framework to electronically trade with others (e.g., electric utilities, banks, suppliers, retail customers).
- Encourages marketplace development of off-the-shelf software solutions to support NAESB WGQ QEDM.
- Strengthens security and integrity of electronic communication.

Importance of the Trading Partner Agreement When Using Internet ET and WGQ QEDM

The Trading Partner Agreement (TPA) specifies what functions each party should perform in electronic transactions. Additionally, the Internet ET contains an optional Technical Exchange Worksheet that outlines basic connectivity information between trading partners. The specifications in the TPA should be tested before reliance on the production implementation for business transactions.

VERSION HISTORY

This NAESB WGQ QEDM manual is based on Version 1.7 of the WGQ Electronic Delivery Mechanism (EDM) manual. Through the joint efforts of the NAESB WGQ, Retail Electric Quadrant and Retail Gas Quadrant, specific sections of the v1.7 EDM manual related to Internet-based file transfer mechanisms were removed and reconstituted as the NAESB Internet ET Specification. The remaining sections of the v1.7 EDM manual were significantly revised, resulting in this document.

The version history provides specific changes to the WGQ EDM manual up to and including its Version 1.7 publication.

1.0 October 24, 1996

1.2 July 31, 1997

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for Gas Industry Standards Board Version 1.2 on NAESB's home page.

Standard	Description	Request No.	Action
4.3.1	Modify standard	R97024	Modify standard
4.3.16	New Standard	R97023	Add standard

1.3 July 31, 1998

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for GISB Version 1.3 on NAESB's home page.

Standard	Description	Request No.	Action
4.1.16	Principle	R97102/R97120	Add principle regarding Informational Postings Web Site information.
4.1.17	Principle	R97102/R97120	Add principle regarding Informational Postings Web Site information.
4.1.18	Principle	R97102/R97120	Add principle regarding Informational Postings Web Site information display.
4.1.19	Principle	R97102/R97120	Add principle regarding Informational Postings Web Site information download.
4.1.20	Principle	R97102/R97120	Add principle regarding Web site display.
4.1.21	Principle	R97102/R97120	Add principle regarding scrolling on Web sites.

Standard	Description	Request No.	Action
4.2.1	Definition	R97102/R97120	Add definition for Informational Postings.
4.2.2	Definition	R97102/R97120	Add definition for Download.
4.2.3	Definition	R97102/R97120	Add definition for Display.
4.2.4	Definition	R97102/R97120	Add definition for Printing.
4.2.5	Definition	R97102/R97120	Add definition for Site Map.
4.2.6	Definition	R97102/R97120	Add definition for Central Address Repository.
4.2.7	Definition	R97102/R97120	Add definition for Navigational Area.
4.2.8	Definition	R97102/R97120	Add definition for Content Area.
4.3.16	Standard	R97102/R97120	Revise standard regarding HTML / RTF formats.
4.3.17	Standard	R97102/R97120	Add standard regarding Informational Postings label.
4.3.18	Standard	R97102/R97120	Add standard regarding Central Address Repository.
4.3.19	Standard	R97102/R97120	Add standard regarding Central Address Repository.
4.3.20	Standard	R97102/R97120	Add standard regarding user ID or password.
4.3.21	Standard	R97102/R97120	Add standard regarding categories and labels for Informational Postings.
4.3.22	Standard	R97102/R97120	Add standard regarding navigational links.
4.3.23	Standard	R97102/R97120	Add standard regarding subcategories and labels for categories of Informational Postings.
4.3.24	Standard	R97102/R97120	Add standard regarding display of TSP identification on Informational Postings Web Site.
4.3.25	Standard	R97102/R97120	Add standard regarding the Site Map.
4.3.26	Standard	R97102/R97120	Add standard regarding search capability.
4.3.27	Standard	R97102/R97120	Add standard regarding Notices category.
4.3.28	Standard	R97102/R97120	Add standard regarding subcategories of Notices.
4.3.29	Standard	R97102/R97120	Add standard regarding labels in Notice Type column.
4.3.30	Standard	R97102/R97120	Add standard regarding display of links in Navigational Area.
4.3.31	Standard	R97102/R97120	Add standard regarding abbreviations used for Informational Postings.
4.3.32	Standard	R97102/R97120	Add standard regarding table of contents of the Tariff.
4.3.33	Standard	R97102/R97120	Add standard regarding “previous” and “next” links.
4.3.34	Standard	R97102/R97120	Add standard regarding columns not supported by TSP.
4.3.35	Standard	R97102/R97120	Add standard regarding display of Index of Customers.

Standard	Description	Request No.	Action
7.3.24	Interpretation	C97010	Address contractual audit rights in relation to six-month time limit.
7.3.35	Interpretation	C97016	Address communication of notices.
Tab 3	Executive Summary	Minor Clarification & Correction	Replace “transaction set” with “EDI data” for clarity.
Tab 4	Business Process and Practices – Security	Minor Clarification & Correction	Add language to address RSA algorithm used for key generation.
Tab 6	Receiving Transactions – Writing the CGI Process	Minor Clarification & Correction	Add language regarding tag values in the HTTP header.
Tab 6	Security – Understanding PGP	Minor Clarification & Correction	Add language to address RSA algorithm used for key generation.
Tab 6	Security – Throughput Consideration	Minor Clarification & Correction	Add language regarding DNS.
Tab 6	Security – Security Requirements - PGP File Encryption	Minor Clarification & Correction	Add language to address RSA algorithm used for key generation.
Tab 6	Checklist of Testing Steps – Client/Browser	Minor Clarification & Correction	Add language to address RSA algorithm used for key generation.
Tab 7	Informational Postings Web Site – Appendices - Informational Postings	R97102/R97120	Add illustrations.

1.4 November 15, 1999

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for GISB Version 1.4 on NAESB’s home page.

Standard	Description	Request No.	Action
Tab 2	Introduction	R99036	Revise language to accommodate new/revised tabs in the manual.
Tab 3	Executive Summary	R99036	Revise language to accommodate EDI/EDM, EBB/EDM and FF/EDM, and to ensure that the text is consistent with existing standards.
Tab 4	Business Process and Practices	R99036	Revise language to accommodate EDI/EDM, EBB/EDM and FF/EDM, and to ensure that the text is consistent with existing standards.

Standard	Description	Request No.	Action
Tab 4	Business Process and Practices	EII Related	Add language regarding EDM network connections and TCP communications.
0.1.1	General Principle	R97058B	Add principle regarding an 'entity'.
0.1.2	General Principle	R97058B	Add principle regarding unique entity common codes.
0.3.1	General Standard	R97058B	Add standard regarding level of entity common codes.
4.1.22	Principle	EII Related	Add principle regarding various levels of user response and inter-activity.
4.1.23	Principle	EII Related	Add principle regarding no limitation on back-end development technology or systems.
4.1.24	Principle	EII Related	Add principle regarding Web site navigational structure.
4.1.25	Principle	EII Related	Add principle regarding additional Informational Postings.
4.1.26	Principle	EII Related	Add principle regarding ease of user interaction on Customer Activities Web sites.
4.1.27	Principle	EII Related	Add principle regarding data elements for EDI and/or flat files.
4.1.28	Principle	EII Related	Add principle regarding functional screen layouts.
4.1.29	Principle	EII Related	Add principle regarding the Content Area.
4.1.30	Principle	EII Related	Add principle regarding data elements with default values.
4.1.31	Principle	EII Related	Add principle regarding a multi-phased implementation of "common look and feel".
4.1.32	Principle	EII Related	Add principle regarding derived data on Customer Activities Web sites.
4.1.33	Principle	EII Related	Add principle regarding elements used in EBB/EDM, EDI/EDM and FF/EDM.
4.1.34	Principle	EII Related	Add principle regarding content and usage of flat files.
4.1.35	Principle	EII Related	Add principle regarding the exchange of flat files.
4.1.36	Principle	EII Related	Add principle regarding redundant connections to the public Internet for GISB EDM Web sites.
4.1.37	Principle	EII Related	Add principle regarding minimization of outbound ports to be opened on the client-side firewall.
4.1.38	Principle	EII Related	Add principle regarding field lengths for FF/EDM.
4.2.7	Definition	EII Related	Revise definition for Navigational Area.
4.2.8	Definition	EII Related	Revise definition for Content Area.
4.2.9	Definition	EII Related	Add definition for Standard Client Configuration.
4.2.10	Definition	EII Related	Add definition for Customer Activities.
4.2.11	Definition	EII Related	Add definition for GISB EDI/EDM.

Standard	Description	Request No.	Action
4.2.12	Definition	EII Related	Add definition for GISB FF/EDM.
4.2.13	Definition	EII Related	Add definition for GISB EBB/EDM.
4.2.14	Definition	EII Related	Add definition for Header.
4.2.15	Definition	EII Related	Add definition for Detail.
4.2.16	Definition	EII Related	Add definition for Form.
4.2.17	Definition	EII Related	Add definition for Matrix.
4.2.18	Definition	EII Related	Add definition for Batch Flat File.
4.2.19	Definition	EII Related	Add definition for Interactive Flat File.
4.3.2	Standard	EII Related	Revise standard regarding time stamp.
4.3.8	Standard	EII Related	Revise standard regarding HTTP.
4.3.9	Standard	EII Related	Revise standard regarding time stamp.
4.3.28	Standard	EII Related	Revise standard to add subcategories for Notices.
4.3.29	Standard	EII Related	Revise standard for the labels of the subcategories that appear in GISB Standard 4.3.28.
4.3.34	Standard	EII Related	Revise standard regarding columns and data fields that would contain data not supported by the TSP.
4.3.36	Standard	EII Related	Add standard regarding use of Internet protocols for accessing all industry business functions.
4.3.37	Standard	EII Related	Add standard regarding use of Internet compatible common browser software.
4.3.38	Standard	EII Related	Add standard regarding access to industry Web sites.
4.3.39	Standard	EII Related	Add standard regarding implementation of current proprietary business function categories on EBBs.
4.3.40	Standard	EII Related	Add standard regarding use of standard navigation.
4.3.41	Standard	EII Related	Add standard regarding navigation through the industry Web site menus.
4.3.42	Standard	EII Related	Add standard specifying the categories and labels for Customer Activities Web sites.
4.3.43	Standard	EII Related	Add standard specifying the sub-categories and labels for the Nominations category.
4.3.44	Standard	EII Related	Add standard regarding the display of information from related EDI data sets.
4.3.45	Standard	EII Related	Add standard regarding display of code value descriptions.
4.3.46	Standard	EII Related	Add standard regarding identification of the TSP on the Customer Activities Web site.
4.3.47	Standard	EII Related	Add standard regarding corresponding data on Web pages and in EDI and flat files.
4.3.48	Standard	EII Related	Add standard display of totals on a Web page.

Standard	Description	Request No.	Action
4.3.49	Standard	EII Related	Add standard regarding placement of navigation and processing functions on Customer Activities Web site.
4.3.50	Standard	EII Related	Add standard regarding navigation for input data lookups.
4.3.51	Standard	EII Related	Add standard regarding availability of GISB Common Codes on Customer Activities Web sites.
4.3.52	Standard	EII Related	Add standard regarding provision of new features via GISB EBB/EDM.
4.3.53	Standard	EII Related	Add standard regarding download of list of supported code values.
4.3.54	Standard	EII Related	Add standard specifying the abbreviations to be used for navigational links on Customer Activities Web sites.
4.3.55	Standard	EII Related	Add standard regarding inclusion of derivable data in EDI/EDM or FF/EDM standards.
4.3.56	Standard	EII Related	Add standard regarding use of common codes and their corresponding names for EDI/EDM, EBB/EDM and FF/EDM.
4.3.57	Standard	EII Related	Add standard regarding minimization of left to right scrolling on Customer Activities Web pages.
4.3.58	Standard	EII Related	Add standard regarding display of informational fields.
4.3.59	Standard	EII Related	Add standard regarding the “Technical Characteristics of the Client Workstation”.
4.3.60	Standard	EII Related	Add standard regarding logon/password mechanism(s) for Customer Activities Web sites.
4.3.61	Standard	EII Related	Add standard regarding encryption for Customer Activities Web sites.
4.3.62	Standard	EII Related	Add standard regarding custom downloadable modules presented by a Customer Activities Web site.
4.3.63	Standard	EII Related	Add standard regarding placement of the Customer Activities link on the Informational Postings Web site.
4.3.64	Standard	EII Related	Add standard regarding private network connections to GISB EDM Web sites.
4.3.65	Standard	EII Related	Add standard regarding identification of the TSP on the Customer Activities Web site.
4.3.66	Standard	EII Related	Add standard regarding the Form and Matrix as separate Web pages.
4.3.67	Standard	EII Related	Add standard regarding provision of new services that do not utilize existing transaction sets.
4.3.68	Standard	EII Related	Add standard regarding display of information on Customer Activities Web sites that is not part of the data dictionary.

Standard	Description	Request No.	Action
4.3.69	Standard	EII Related	Add standard specifying the nomenclature to be used for processing functions on Customer Activities Web sites.
4.3.70	Standard	EII Related	Add standard regarding approved list of available TCP ports and UDP ports for EDM implementation.
4.3.71	Standard	EII Related	Add standard regarding inbound ports on the client-side firewall.
4.3.72	Standard	EII Related	Add standard regarding provision of alternate views on Customer Activities Web sites.
4.3.73	Standard	EII Related	Add standard regarding placement of data fields used to populate or control the population of other fields.
4.3.74	Standard	EII Related	Add standard regarding data group and ordering of data elements that have been submitted to GISB for standardization.
4.3.75	Standard	EII Related	Add standard specifying the sub-categories and labels for the Flowing Gas category.
4.3.76	Standard	EII Related	Add standard regarding the combining of the Form and the Matrix on a Customer Activities Web page.
4.3.77	Standard	EII Related	Add standard regarding the population of upstream and downstream information on a nomination.
4.3.78	Standard	EII Related	Add standard regarding population of the Form with data from the Matrix on a Customer Activities Web page.
4.3.79	Standard	EII Related	Add standard specifying the sub-categories and labels for the Invoicing category.
4.3.80	Standard	EII Related	Add standard regarding format of GISB FF/EDM flat files.
4.3.81	Standard	EII Related	Add standard regarding format of GISB FF/EDM flat files.
4.3.82	Standard	EII Related	Add standard regarding format of GISB FF/EDM flat files.
4.3.83	Standard	EII Related	Add standard regarding encryption for Flat File EDM.
4.3.84	Standard	EII Related	Add standard regarding HTTP Basic Authentication for access to Interactive Flat File EDM.
4.3.85	Standard	EII Related	Add standard specifying the sub-categories and labels for the Capacity Release category.
Tab 5	Related Standards	R98060	Add HTTP transaction-set Code Values table.
Tab 5	Related Standards	R97058B	Revise language regarding entity common codes.

Standard	Description	Request No.	Action
Tab 6	Technical Implementation – Internet EDI/EDM & Batch FF/EDM	R99036 / EII Related	Revise text, tables, etc. to incorporate EII work product including: • Incorporate references to Batch FF/EDM. • Add Batch Flow Diagram. • Move 'Appendix A – Reference Guide' and 'Appendix B – Repudiation and Validation Examples' to Tab 10. • Delete 'Appendices – Informational Postings' (Appendices C – O). • Move 'Appendix P – Minimal and Suggested Technical Characteristics and Guidelines for the Developer and User of the Informational Postings Web Site' to Tab 10 (new Appendix C).
Tab 6	Technical Implementation – Internet EDI/EDM & Batch FF/EDM – Data Dictionary for Internet EDM	R98060	Revise 'transaction-set' data element.
Tab 6	Technical Implementation – Internet EDI/EDM & Batch FF/EDM -- Table A – Internet EDM Standard Error Codes and Messages	R97126	Add three error Validation Codes.
Tab 7	Technical Implementation – Informational Postings Web Site (IP/EDM)	R99036	Add new section to accommodate deletion of Appendices C – O for Informational Postings. Examples have been replaced with descriptive text.
Tab 8	Technical Implementation – EBB/EDM	R99036 / EII Related	Add new section to accommodate EII work product.
Tab 9	Technical Implementation – Interactive FF/EDM	R99036 / EII Related	Add new section to accommodate EII work product.
Tab 10	Appendices	R99036 / EII Related	Includes all appendices (Appendices A – D). Appendix D was added to incorporate EII work product.

1.5 August 13, 2001

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for NAESB WGQ Version 1.5 on NAESB's home page.

Standard	Description	Request No.	Action

Standard	Description	Request No.	Action
4.1.5	Principle	R96022A	Deleted.
4.1.8	Principle	R96022A	Deleted.
4.2.20	Definition	R97104	Added.
4.3.77	Standard	R98085	Deleted.
4.3.86	Standard	R96022A	Added.
4.3.87	Standard	R97104	Added.
EDIINT/ AS2	Executive Summary, Business Process and Practices, and Technical Implementation – Internet EDI/EDM & Batch FF/EDM	R99035	Modified the Electronic Delivery Mechanism Implementation guide to support standards convergence with Internet Engineering Taskforce “HTTP Transport for secure EDI” (a.k.a. EDIINT standard AS2)
Tab 4	FTTF Guidelines	CR000503	Modified TCP Communications regarding specified TCP ports. Modified Security regarding PGP version.
Tab 5	Related Standards	R97064D R97064G	Modified HTTP transaction-set Code Values for NAESB WGQ Standards 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6 and 1.4.7.
Tab 6	Technical Implementation – Internet EDI/EDM & Batch FF/EDM --	R97064D	Modified transaction-set data element by changing G850NMST to G873NMST.
Tab 6	Technical Implementation – Internet EDI/EDM & Batch FF/EDM --	Minor correction submitted May 2, 2001	Replaced the references to uuencoding to base64-encoding.
Tab 8	FTTF Guidelines	CR000503	Modified Server Specifications regarding specified HTTP ports.
Tab 10	FTTF Guidelines	CR000503	Modified Appendix A regarding HTTP and HTML version.
Tab 10	FTTF Guidelines	CR000503	Modified Appendix C regarding minimum technical (11/15/1999) characteristics and guidelines for customer activity web site.
Tab 10	FTTF Guidelines	CR000503	Modified Appendix D regarding minimum technical (7/31/1998) characteristics and guidelines for the developer and user of the informational postings web site.

1.6 July 31, 2002

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for NAESB WGQ Version 1.6 on NAESB's home page.

Standard	Description	Request No.	Action
ALL	Name Change	n/a	Apply organizational name change from 'GISB' to 'NAESB' or 'NAESB WGQ' and from 'Gas Industry Standards Board' to 'North American Energy Standards Board' or 'North American Energy Standards Board Wholesale Gas Quardant' where applicable for clarity.
4.1.1	Principle	Sandia Report Recommendation	Principle deleted.
4.1.11	Principle	Sandia Report Recommendation	Principle deleted.
4.1.39	Principle	Sandia Report Recommendation	New Principle added.
4.3.4	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.6	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.8	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.10	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.15	Standard	Sandia Report Recommendation	Revise language of standard.
		R01016	Update standard to reflect use of PGP 2.6.2 compliant products.
4.3.21	Standard	EDM Order 637 Item	Revise the display of pipeline Informational Postings web sites to provide for placement/navigation of links for Planned Service Outages and Organizational Charts.
4.3.23	Standard	EDM Order 637 Item	Revise the display of pipeline Informational Postings web sites to provide for placement/navigation of links for Planned Service Outages and Organizational Charts.
4.3.61	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.70	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.83	Standard	Sandia Report Recommendation	Revise language of standard.
4.3.88	Standard	Sandia Report Recommendation	New Standard added.
Tab 3	Executive Summary	Sandia Report Recommendation	Various changes to reflect standard language changes.

Standard	Description	Request No.	Action
Tab 4	Business Process and Practices	Sandia Report Recommendation	Revise name of section
		R01016	Update text to reflect use of PGP 2.6.2 compliant products.
Tab 5	Related Standards	Sandia Report Recommendation	Revise language in 'Hypertext Transfer Protocol (HTTP)' subsection to reflect standard language changes.
Tab 6	Technical Implementation - Internet EDI/EDM & Batch FF/EDM	Sandia Report Recommendation	Revise language to reflect standard language changes.
		R01016	Update text to reflect use of PGP 2.6.2 compliant products.
		R01019	Add header data element 'Refnum' to EDI/EDM specification and corresponding error and warning codes.
Tab 9	Technical Implementation – Interactive FF/EDM	Sandia Report Recommendation	Revise language to reflect standard language changes.
Tab 10	Appendix A – Reference Guide	R01016	Update text to reflect use of PGP 2.6.2 compliant products.
		NAESB WGQ EDM Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.
	Appendix B – Repudiation & Validation Examples	R01016	Update text to reflect use of PGP 2.6.2 compliant products.
		NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in Standard 4.3.59.
	Appendix C – Minimum Technical Characteristics for Customer Activities	NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.
	Appendix D - Minimum Technical Characteristics for Informational Postings	NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.
	Appendix E – Minimum Technical Characteristics for an EDM Server	Sandia Report Recommendation	Added new Appendix E to support standard language changes.
		NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.

1.7 December 31, 2003

The following table shows a summary of requests and interpretations resulting in modifications to the Electronic Delivery Mechanism Related Standards. For full text of these modifications, refer to the Final Actions for NAESB WGQ Version 1.7 on NAESB's home page.

Standard	Description	Request No.	Action
4.1.14	Delete Standard	R03002	
4.3.1	Standard	R03002	Modify Standard
4.3.2	Standard	R03002	Modify Standard
7.3.50	Standard	C03001	Add Standard
Tab 2	Introduction	NAESB EDM WGQ Subcommittee	Update title of Appendix E
Tab 10	Appendix C – Minimum Technical Characteristics for Customer Activities	NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.
	Appendix D – Minimum Technical Characteristics for Informational Postings	NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.
	Appendix E – Minimum Technical Characteristics for a EDM Communications	NAESB EDM WGQ Subcommittee	Update "Minimum Technical Characteristics" for NAESB Web Sites per instructions for annual review in NAESB WGQ Standard 4.3.59.

Pending 1.8 Changes

Upon its publication, version 1.8 of the WGQ QEDM will reflect:

1. changes in the NAESB WGQ standards in response to the requirements of FERC Order 2004.
2. changes resulting from the creation of the NAESB Internet Electronic Transport.

INTRODUCTION

NAESB is a voluntary, non-profit organization comprised of members from all aspects of the energy industry. NAESB's mission is to take the lead in developing and implementing standards across the energy industry to simplify and expand electronic communication, and to streamline business practices. This will lead to a seamless North American energy marketplace, as recognized by its customers, the business community, industry participants and regulatory bodies.

NAESB standards are written as 'minimums'. A trading party may offer to 'exceed the minimum standard' by offering additional functions or features as options, but should not require their use. Such additional features or functions are termed "mutually agreed to" in that if both trading partners agree on the inclusion, the additional feature requirements will be met. However, if either trading party does not agree to the inclusion of additional features, then the partners must allow for transmission and receipt of data using the minimum standards. NAESB defines 'exceed the minimum standard' to mean surpassing the standards without negative impact on contracting and non-contracting parties

All of the standards have been adopted with the anticipation that as the industry evolves and uses the standards, additional and amended NAESB standards will be necessary. Any industry participant seeking additional or amended standards (including principles, definitions, standards, data elements, process descriptions, technical implementation instructions) should submit a request to the NAESB office, detailing the change, so that the appropriate process may take place to amend the standards.

TAB 1 Executive Summary
Provides a brief outline of this guide and the industry context for its use

TAB 2 Version Notes
Contains notes about the current version and a summary of changes from preceding versions

TAB 3 Introduction
Provides a background statement about NAESB's Mission and the design of this guide

TAB 4 Business Process & Practices
Provides an overview of business processes and NAESB WGQ approved principles, definitions and standards related to this guide

TAB 5 Related Standards
Provides an overview of related standards

TAB 6 Technical Implementation - Internet EDI/EDM and Batch FF/EDM
Provides quadrant specific information related to Internet EDI/EDM and Batch FF/EDM

TAB 7 Technical Implementation - Informational Postings Web Site
Provides an overview of the business processes for IP/EDM

TAB 8 Technical Implementation - EBB/EDM
Provides an overview of the business processes for EBB/EDM

TAB 9 Technical Implementation - Interactive FF/EDM

Provides an overview of the business processes for Interactive FF/EDM

TAB 10 Appendices

Appendix A - Reference Guide
Appendix B - Minimum Technical Characteristics and Guidelines for the Developer and User of the Customer Activities Web Site
Appendix C - Minimal and Suggested Technical Characteristics and Guidelines for the Developer and User of the Informational Postings Web Site
Appendix D - Minimum Technical Characteristics for EDM Communications

BUSINESS PROCESS AND PRACTICES

A. Overview

Where Quadrant Electronic Delivery Mechanism (QEDM) Fits in Gas Industry Commerce

The scope of WGQ Quadrant EDM (QEDM) is the implementation of electronic commerce over the Internet in the wholesale gas industry using ANSI ASC X12 transactions (EDI/EDM), Informational Posting Web sites, Customer Activities Web sites (EBB/EDM), and flat file (FF/EDM) transactions. While these electronic commerce methods support many common gas industry transactions, each method has a unique format, data and technology requirements that serve a specific purpose in the wholesale gas marketplace.

The NAESB WGQ EDI/EDM standards define the file formats, data elements and transaction types used in transmitting ANSI ASC X12 transactions over the Internet. These standards have been in place since version 1.0 of the standards issued by the Gas Industry Standards Board (GISB), NAESB's predecessor organization.

In Version 1.1, GISB issued standards for the navigation and layout of Informational Posting Web sites. Informational Posting Web sites are publicly accessible Internet web sites that provide information about the business practices of jurisdictional facilities. Much of the information posted on Informational Postings Web sites is required by the Federal Energy Regulatory Commission ('the Commission').

In Version 1.4 of the GISB Standards, standards for EBB/EDM and FF/EDM were added. The EBB/EDM standards were prompted by the actions of the Commission. In Order No. 587-G, the Commission required jurisdictional facilities to conduct all business transactions using Internet communications to resolve the difficulties created by the proprietary Electronic Bulletin Boards (EBBs) and to provide shippers with a standardized method for doing business. In Order No. 587-I, the Commission recognized that "While shippers and pipelines did not object to the requirement that pipelines support the use of EDI, they contend that EDI should not be the exclusive means of communication and that some form of interactive approach is also necessary." The EBB/EDM approach was developed to satisfy two main issues: (1) EDI/EDM may only be cost-effective for those doing high volume transactions and (2) shippers did not want to lose the interactive functionality provided by EBBs. Further, the Commission stated in Order No. 587-I, that "[it] continues to favor an approach to communication in which shippers can either transact business using computer-to-computer file transfers or conduct business online in an interactive fashion, whichever approach best fits their needs."

The NAESB WGQ FF/EDM standards specify the exchange of comma-delimited files between trading partners across the Internet. FF/EDM can be accomplished in two ways: 1) a computer-to-computer, or "Batch FF/EDM" mode, similar to an EDI file transfer, or 2) by a human-to-computer exchange, using an interactive web browser. This latter method is referred to as Interactive FF/EDM.

The WGQ QEDM defines the various format, content and data requirements of these electronic commerce methods. Additionally, for Customer Activities Web sites, Informational Postings Web sites and Interactive FF/EDM methods, the WGQ QEDM also defines the electronic delivery

mechanism used. That is, the WGQ QEDM defines the protocols, security and transmission requirements for each electronic commerce method.

QEDM and the NAESB Internet Electronic Transport

The electronic delivery mechanism for EDI/EDM and Batch FF/EDM is defined by the NAESB Internet ET standard. The NAESB Internet ET is a multi-quadrant standard that specifies the protocols, security and transmission requirements for computer-to-computer transactions. Implementers of EDI/EDM and Batch FF/EDM should reference the NAESB Internet ET standards for transmission requirements.

Business Reasons for Using QEDM

Throughout the industry there are various systems within each company that process information related to scheduling, allocation, invoicing, etc. The use of standardized EDI transaction sets, common Web site navigation and layout, and uniform flat file data formats eliminates errors that result from manual processing, or processing complications of nonstandard electronic communications methods between trading partners.

As a result, a company that relies on computerized systems to conduct business transactions with several trading partners may process transactions more efficiently by implementing QEDM standards.

Additionally, by using the NAESB Internet ET for transmission, a single connection method can be utilized, eliminating the complexity of different connection methods for different trading partners.

Importance of the NAESB WGQ Trading Partner Agreement

The NAESB WGQ Trading Partner Agreement (TPA) provides a standardized contractual agreement to facilitate electronic exchange of documents between trading partners.

The TPA (WGQ Standard 6.3.3) specifies what functions are to be performed and by whom during an EDI/EDM or FF/EDM data exchange. In addition, the NAESB Internet ET specifies an optional Technical Exchange Worksheet that outlines basic communication information. The specifications in the TPA should be tested before production implementation.

Security

Though many decisions as to overall security measures are left to each trading partner and their environment, security standards have been created to ensure a minimum level of confidence in conducting business over the Internet and to provide some uniformity in the implementation of security. The security requirements include the current four primary security aspects:

- Data privacy: unauthorized parties cannot decipher the content of the data
- Data integrity: unauthorized parties cannot modify or corrupt the data
- Authentication: the receiver is certain of the identity of the sender
- Non-repudiation: the sender cannot deny ownership of the transaction if it was sent with his/her digital signature.

To prevent unwanted intruders from connecting to Web sites, basic authentication is required. Additional issues such as firewall security are discussed in the standards, but specific security implementation details should be addressed by each organization.

Concerns About Future Reliability of the Public Internet

The infrastructure of the Internet has proven to be dependable, however, industry participants should continue to monitor the Internet's viability as an infrastructure. The potential lack of transmission capacity, denial of service, malicious hacker attacks, worms, and viruses may limit the effectiveness of the Internet as a transmission mechanism. The effects of these limitations on the industry or the Internet as a whole are difficult to predict.

B. Implementation Options

The optimum QEDM implementation for an organization should be based on an assessment of specific needs and the resources available to that organization. Given the existence of in-house systems expertise, it may be possible to implement the QEDM technologies with little, if any, assistance. Alternately, other organizations may want to acquire commercially available software packages and/or obtain QEDM services from a third party. The implementation examples herein are not designed to be exhaustive.

In-house Implementation

For an in-house implementation, all parties are strongly encouraged to investigate the ramifications of introducing electronic commerce using the Internet. This includes ensuring that all customer data, internal data, and applications are secure from intruders or other unauthorized parties.

Participation in electronic commerce over the Internet involves hardware, software, and technical expertise including the development and maintenance of server applications to process incoming files or to format outbound files.

Using a Third Party

Third-party providers offer a variety of services, from "turn key" solutions to specialized technical assistance. Such assistance might include programming, system configuration and system administration as well as private communication links.

A combination of internal expertise and third-party services may be a desirable approach. A needs assessment should be completed to determine where third-party services are useful. For example, a company may have experience with Internet technology, but little experience with X12 translators.

C. Quadrant Electronic Delivery Mechanism Related Standards

Principles:

4.1.1 [Deleted]

4.1.2 The WGQ Quadrant Electronic Delivery Mechanism does not pick winners, rather it should create an environment where the marketplace can dictate a winner or winners.

4.1.3 The solutions should be cost effective, simple and economical.

4.1.4 The solutions should provide for a seamless marketplace for natural gas.

4.1.5 [Deleted]

4.1.6 Data providers (Transportation Service Providers) should interface with third party vendors according to NAESB WGQ standards.

4.1.7 Electronic communications between parties should be done on a nondiscriminatory basis, whether through an agent or directly with any party.

4.1.8 [Deleted]

4.1.9 [Deleted]

4.1.10 There should be at least one standard (computer-to-computer exchange of transactional data) for data exchange format.

4.1.11 [Deleted]

4.1.12 Protocols and tools that parties elect to support should be “Internet-compatible”.

4.1.13 Regarding the request that EBBs need to provide the ability to create and print specialized reports, the data should be made available so as to permit the users of the information to download the data to be used in their applications.

4.1.14 [Deleted]

4.1.15 The North American Energy Standards Board Wholesale Gas Quadrant should not set standards for site-level security. Individual organization security standards should be relied upon.

4.1.16 Informational Postings Web Sites should be easy to locate.

4.1.17 Information within an Informational Postings Web Site should be easy to locate.

4.1.18 Information across Informational Postings Web Sites should be consistently displayed.

4.1.19 Information across Informational Postings Web Sites should be easy to download.

4.1.20 Display space for content on Web sites should be maximized.

4.1.21 On the Web sites, the use of scrolling, especially left to right, should be minimized.

4.1.22 Web site standards should not preclude various levels of user response and inter-activity. Minimum levels of user response or inter-activity should be developed.

4.1.23 Web site standards should not dictate or limit back-end development technology or systems. Industry Web sites should be accessible by a Standard Client Configuration.

4.1.24 A standardized Web site navigational structure should be developed to provide access to business functions. The hierarchical relationship, structure and order for navigation on the Web site should be established in a standardized manner.

4.1.25 [Deleted] related to Order 2004; as per the 5/6/2004 EC Meeting

4.1.26 Customer Activities Web sites should be designed for ease of user interaction.

4.1.27 There should generally be a one-to-one relationship between data elements used for EDI and/or flat files and the data displayed on Customer Activities Web pages.

4.1.28 Standard field name descriptors or abbreviations, and navigation and functional screen layouts should be used on all Customer Activities Web pages. There should be no standards for font size, colors, etc. Functional screen layouts should be developed as standards which would divide each transactional screen into separate areas and define which data elements belong in each specific area.

4.1.29 Information that is constant for the displayed Content Area may be placed in the page Header.

4.1.30 Data elements that have default values may be placed last to minimize scrolling.

4.1.31 As a general guideline, the initial phase of each business function category (of a multiple phase implementation) of “common look and feel” for Internet transactions that are not currently standardized should begin subsequent to the implementation of the currently standardized data sets to the Web. This does not preclude the implementation of new standardized data sets as they become available.

4.1.32 There is displayed information on Customer Activities Web sites which does not have a comparable data element in EDI; however, the data (e.g. totals, reports, calculations) is derived from other EDI data elements. Provision of such information does not require the development of an EDI data set to accomplish a one-to-one match. However, any Customer Activities Web function should be derivable from information available in EDI data sets.

4.1.33 When standardized, all elements used in standard EBB/EDM, EDI/EDM and FF/EDM should be defined in the related NAESB WGQ x.4.z standard.

4.1.34 For NAESB WGQ FF/EDM, the content and usage of flat files should reasonably correspond to the NAESB WGQ data sets used for NAESB WGQ EDI/EDM.

4.1.35 If NAESB WGQ FF/EDM is implemented, flat files should be exchanged via the NAESB WGQ EDI/EDM site or the Customer Activities Web site.

4.1.36 Trading partners should maintain redundant connections to the public Internet for NAESB WGQ EDM Web sites, which include all NAESB WGQ standardized Internet communication. These redundant connections should be topographically diverse (duality of) paths to minimize the probability of a single port of failure.

4.1.37 Transportation Service Provider EDM implementations should minimize the number of outbound ports required to be opened on the client-side firewall.

4.1.38 Until such time as NAESB WGQ standardizes field lengths for data elements, data element
field lengths for FF/EDM should not exceed the corresponding field lengths defined for EDI/EDM as defined in the ANSI ASC X12 version in the NAESB WGQ implementation guide in which the NAESB WGQ data element was adopted.

4.1.39 Trading Partners should mutually select and utilize a version of the NAESB WGQ EDM standards under which to operate, unless specified otherwise by government agencies. Trading Partners should also mutually agree to adopt later versions of the NAESB WGQ EDM standards, as needed, again unless specified otherwise by government agencies.

4.1.p1 For any location(s), the Transportation Service Provider (TSP) may, at its discretion, elect to provide gas quality information in addition to that specified in NAESB WGQ Standard No. [S2]. The TSP may choose how to provide the information.

Definitions

4.2.1 "Informational Postings" is the term that identifies common information as specified in WGQ Standard 4.3.23. (Per Order 2004; Changed during the 5/6/2004 EC Meeting)

4.2.2 "Download" is the term used to describe the retrieval of information from a Web site in a format suitable for storage.

4.2.3 "Display" is the term used to describe the typical visual presentation derived by a browser as a result of retrieval of information from a given URL.

4.2.4 "Printing" is the term used to describe the typical printed layout derived when a document is printed from a display tool (browser, word processor, etc.).

4.2.5 "Site Map" is the term used to describe a Web page of URL links, which resembles a table of contents or directory tree structure, of categories and subcategories of information.

4.2.6 "Central Address Repository" (CAR) is the term used to describe: 1) the Web site providing links to all Transportation Service Providers' Informational Postings, and 2) the entity administering and maintaining the above Web site and repository.

4.2.7 "Navigational Area" is the term used to describe the area on the left side of the browser display providing links to the Content Area and other navigational links. Navigational Area is not required to be displayed on Customer Activities Web pages where data entry, reporting or inquiry are displayed.

4.2.8 "Content Area" is the term used to describe the area directly to the right of the Navigational Area of the browser display. When the Navigational Area is not displayed the entire browser display is content area.

4.2.9 “Standard Client Configuration” is the term used to describe the configuration that allows simultaneous access to multiple industry Web sites.

4.2.10 “Customer Activities” is the term used to refer to the business function categories relating to Nominations, Flowing Gas, Invoicing, Capacity Release, Contracts and other business functions on industry Web sites.

4.2.11 “NAESB WGQ EDI/EDM” is the term used to describe ANSI ASC X12 computer-to-computer electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards in the NAESB WGQ Implementation Guides and communicated between trading partners over the Internet using the NAESB Internet Electronic Transport.

4.2.12 “NAESB WGQ FF/EDM” is the term used to describe a standardized flat file electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards. NAESB WGQ FF/EDM is communicated between trading partners over the Internet using the NAESB Internet Electronic Transport.

4.2.13 “NAESB WGQ EBB/EDM” is the term used to describe the NAESB WGQ standardized electronic interchange of information for Customer Activities Internet Web site presentations.

4.2.14 “Header” is the term used to describe the area at the top of the Content Area of the browser display.

4.2.15 “Detail” is the term used to describe the area directly below the Header in the Content Area of the browser display.

4.2.16 “Form” is the term used to describe the portion of the Content Area of the browser display on Customer Activities Web sites used for single transaction entry or display as well as, optionally, data selection. The Form should be either in the upper portion of the Content Area or, alternatively, a single page linked to the Matrix.

4.2.17 “Matrix” is the term used to describe the portion of the Content Area of the browser display on the Customer Activities Web sites used to display selected data entered on the Form and, when appropriate, for data entry. The Matrix should be either the lower portion of the Content Area (that area below the Form) or, alternatively, a single page linked to the Form.

4.2.18 “Batch Flat File” is the term used within NAESB WGQ FF/EDM to describe the automated computer-to-computer transfer of flat files.

4.2.19 “Interactive Flat File” is the term used within NAESB WGQ FF/EDM to describe the transfer of flat files using an interactive browser.

4.2.20 Testing data sets between trading partners includes testing of:

1. intended business results,
2. Internet ET, and
3. related EDI/EDM and, where supported, FF/EDM implementation issues.

Testing should include enveloping, security, data validity, and standards compliance (e.g. ANSI X12 and NAESB WGQ QEDM Related Standards).

Standards

4.3.1 All parties sending and receiving data should accept a TCP/IP connection. At a minimum, sending and receiving parties should designate an Internet address for the receipt and delivery of NAESB WGQ standardized data sets.

4.3.2 On time stamping, data leaves control of the originator by the same time (deadline), regardless of mechanism (3rd party service provider time stamp is acceptable) and 15 minutes of communication time should be available to allow accumulation of all transactions to the pipeline.

4.3.3 Originating party is any system originating/creating the document reflecting the transaction to be submitted (this could also include a third-party service provider or a transportation service provider's EBB). Within the 15-minute window the transaction should be received by the receiving party. Errors in transmission shall be governed by the terms and conditions of the trading partner agreement between the parties. The receiving party may also waive the 15-minute window requirement at its own discretion.

4.3.4 Trading partners should retain transactional data for at least 24 months for audit purposes.

This data retention requirement only applies to the ability to recover or regenerate electronic records for a period of two years and does not otherwise modify statutory, regulatory, or contractual record retention requirements.

4.3.5 Documents that are made available on the Transportation Service Provider's Web site should be downloadable on demand in a NAESB WGQ specified electronic structure.

4.3.6 (Deleted; related to Order 2004; BPS 040311Workpaper)

4.3.7 Moved to Internet ET standard [10].3.3.

4.3.8 Moved to Internet ET standard [10].3.4.

4.3.9 Moved to Internet ET standard [10].3.5-7.

4.3.10 Moved and modified as Internet ET standard [10].3.8.

4.3.11 Moved and modified as Internet ET standard [10].3.9.

4.3.12 Moved to Internet ET standard [10].3.10.

4.3.13 Moved and modified as Internet ET standard [10].3.11.

4.3.14 Moved and modified as Internet ET standard [10].3.14.

4.3.15 Moved and modified as Internet ET standard [10].3.15.

4.3.16 On the Informational Postings website, the Index of Customers document may be displayed in HTML or RTF and should be downloadable in a defined, tab-delimited ASCII text file, with provisions for title information and footnote capability, as set forth in Code of Federal Regulations Part 284, Section 223. (Reference Order Number 637, Docket No. RM98-10-000, issued February 9, 2000, "Appendix A, Instruction Manual for Electronic Filing of the Index of Customers" issued pursuant to the above referenced order.)

4.3.17 "Informational Postings" should be the label used for navigation to or within the Web site.

4.3.18 Transportation Service Providers should provide and keep current to the Central Address Repository the addresses (URLs) for the following in a specified format and communication method(s):

Informational Postings
.
Capacity
Energy Affiliate Info
Index of Customers
Notices
Standards of Conduct Info
Tariff
Downloads
Site Map

4.3.19 The Central Address Repository should make available a consolidated repository of the Transportation Service Providers' current URLs listed in NAESB WGQ Standard 4.3.18 in two ways: 1) a vehicle to link to sites and categories, and 2) a downloadable list.

4.3.20 A user ID or password should not be required to access the Central Address Repository or the Transportation Service Provider's Informational Postings Web Site.

4.3.21 (Deleted; related to Order 2004; BPS 040311Workpaper)

4.3.22 The following navigational links should appear last in the Navigational Area and be labeled as follows:

Downloads
Search
Site Map

4.3.23 Transportation Service Providers should establish an Informational Postings Web site accessible via the Internet. The subcategories and labels for the categories of Informational Postings should be as follows:

CATEGORIES	**SUBCATEGORIES**
Capacity	Operationally Available
	Unsubscribed
Energy Affiliate Info	Capacity Allocation Log (when applicable)
	Employee Transfers
	Names and Addresses

	Potential Mergers
	Shared Facilities
Gas Quality	
Index of Customers	
Non-discrimination Rqts	Discounts
	Emergency Deviations
	Implementation Procedures
	Information Disclosure
	Tariff Discretionary Actions
Notices	Critical
	Non-Critical
	Planned Outage Service
Organizational Charts	
Posted Imbalances	
Tariff	Title Page
	Table of Contents
	Preliminary Statement
	Map
	Currently Effective Rates
	Rate Schedules
	General Terms and Conditions
	Form of Service Agreement
	Entire Tariff
	Sheet Index
Transactional Reporting	

These categories and labels should appear in the order specified above and before any others.

4.3.24 The Transportation Service Provider's Informational Postings Web Site should include the name, nickname, or name abbreviation of the Transportation Service Provider so that it will appear first in the browser title bar. Content Area documents should have a similar name when printed.

4.3.25 The Site Map should be provided in the Content Area and should include links to all levels of categories described in NAESB WGQ Standard 4.3.23. Each level of category and subcategory should be indented to show its relationship and should be presented in text form to best utilize space.

4.3.26 Transportation Service Providers should provide search capability for a word or phrase within the text, headers, and footers of the entire tariff and within any of the following tariff subcategories: 1) Rate Schedules, 2) General Terms and Conditions, and 3) Form of Service Agreement. The results of the search should provide a list of links to the pages containing the word or phrase. "Search" should appear as a link and be labeled as such, appearing immediately above the Site Map link.

4.3.27 The "Notices" category (as shown in the Navigational Area) should expand to a list of subcategories (in the Navigational Area) when clicked; there are no display requirements for the Content Area. Each of these subcategories, when clicked, should display a list of notices for that subcategory in the Content Area.

4.3.28 For the subcategories of Notices, the first column headings in the Content Area should be Notice Type, Posted Date/Time, Notice Effective Date/Time (and Notice End Date/Time, when applicable), Notice Identifier (optional*), Subject and Response Date/Time, when applicable, with the list sorted in reverse chronological order by Posted Date/Time.
* When used as a reference, the Notice Identifier should be displayed.

4.3.29 The words or labels that should appear in the "Notice Type" column in NAESB WGQ Standard 4.3.28 should be:

Words	**Labels**
Capacity Constraint	Cap. Constraint
Capacity Discount	Cap. Discount
Curtailment	Curtailment
Force Majeure	Force Majeure
Intraday Bump	Bump
Maintenance	Maintenance
Operational Flow Order	OFO
Phone List	Phone List
Press Release, Company News	News
Other	Other

4.3.30 The links to categories of Informational Postings should be displayed vertically on the left (Navigational Area) of the screen at all times.

4.3.31 With regard to Informational Postings, when using abbreviations to display column and field names, the following abbreviations should be used:

Available	Avail
Capacity	Cap
Date/Time	D/T
Description	Desc
Effective	Eff
Location	Loc
Quantity	Qty
Maximum Daily Quantity	MDQ
Maximum Storage Quantity	MSQ

4.3.32 Each line of the Table of Contents of the Tariff should provide a link to a corresponding sheet by clicking on the sheet number shown. The subcategories Currently Effective Rates, Rate Schedules, General Terms and Conditions, and Form of Service Agreement should provide either a table of contents or a similar breakdown, when applicable, and a link function to a corresponding sheet. For example, if General Terms and Conditions has a separate table of contents, it should provide corresponding links.

4.3.33 For Tariff documents, "previous" and "next" links should be displayed at the top of each HTML document. If the "previous" and "next" links may scroll off the display, they should also be provided at the bottom of the HTML document.

4.3.34 Columns and data fields that would contain data not supported by the Transportation Service Provider should be eliminated on display and/or entry, and left empty on download.

4.3.35 For the “Index of Customers”, the column headings for the web site display for the “Index of Customers” should be displayed in the order provided for in reference Order No. 637, Docket No. RM98-10-000, issued February 9, 2000, “Appendix A, Instruction Manual for Electronic Filing of the Index of Customers” issued June 29, 2000, pursuant to the above referenced order, for those fields identified as “detail fields”. In addition, the other “Index of Customers” information not included in the columnar display should be accessible from the columnar display.

4.3.36 Internet protocols should be used for accessing all industry business functions.

4.3.37 Moved and modified as Internet ET standard [10].3.20.

4.3.38 Industry Web sites should be accessible via the public Internet using common browser software.

4.3.39 Each implementation of a current proprietary business function category on EBBs should remain available until such time as that business function category is tested and implemented via a Customer Activities Web site.

4.3.40 Standard navigation should be used to access all business functions on industry Web sites.

4.3.41 Navigation through the industry Web site menus should be consistent for location and technique.

4.3.42 The categories and the labels for Customer Activities Web sites should appear, if applicable, in the Navigational Area as follows:

- Nominations
- Flowing Gas
- Invoicing
- Capacity Release
- Contracts
- Informational Postings
- Site Map

Links supporting Mutually Agreeable categories should precede Informational Postings

4.3.43 The sub-categories and the labels for the category of Nominations should appear, if applicable, in the Navigational Area as follows:

- Nomination
- Confirmation
- Scheduled Quantity

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.44 A Customer Activities Web page may display information (data elements and code values) from multiple functionally related NAESB WGQ EDI data sets (i.e. nominated quantities and scheduled quantities may appear on the same Web screen).

4.3.45 NAESB WGQ standard code value descriptions should be displayed for code values where appropriate.

4.3.46 The Customer Activities Web Site should include the name, nickname, or name abbreviation of the Transportation Service Provider in the browser title bar. The name of the business function should be displayed in the Header.

4.3.47 Where they exist for the same business function, flat files and EDI should use the same nomenclature for data set names, data element names, code values and/or code value descriptions, abbreviations and message text. Corresponding Web pages should use data set names, data element names, code value descriptions, abbreviations and message text that correspond to those used in flat files and EDI, where they exist.

4.3.48 Totals, when appropriate, should be displayed within the Content Area of the Web page in a manner which distinguishes them from the data.

4.3.49 Where navigation and/or processing functions exist for a Customer Activity, the Content Area should contain navigation in the Header on the left and processing functions in the Header on the right.

4.3.50 Navigation for input data lookups, if provided, should be placed near the field being looked up. Navigation for informational lookups, if provided, should be included in the Header.

4.3.51 NAESB WGQ Common Codes for entity and location should be available for data validation or selection (viewing) on a Customer Activities Web site and in a standardized downloadable format for use by customers and third party service providers. Cross-references to proprietary codes may be provided on a mutually agreeable basis.

4.3.52 A Transportation Service Provider (TSP) which determines to provide new features utilizing existing transaction sets via NAESB WGQ EBB/EDM, for each transaction upon inception of support for such service, should:

- If NAESB WGQ EDI/EDM or FF/EDM standards exist for the transaction set, provide the service via NAESB WGQ EDI/EDM, or FF/EDM or both, utilizing modifications defined by the TSP to the existing file structures;

and,

- Submit a request for modification or enhancement of the transaction set to NAESB WGQ including details of the interim EBB/EDM, EDI/EDM and/or FF/EDM implementation.

4.3.53 Where a Transportation Service Provider (TSP) utilizes a subset of available NAESB WGQ code values for specific data elements for inbound documents to the TSP, the TSP should make available a list of the supported code values in a download utilizing a NAESB WGQ electronic format.

4.3.54 With regard to the navigational links on Customer Activities Web sites, when using abbreviations, the following should be used:

Full Name	Abbreviation
Customer Activities	**Customer Activities**
Nominations	Nominations
Flowing Gas	Flowing Gas
Invoicing	Invoicing
Capacity Release	Capacity Release
Contracts	Contracts

Informational Postings	Info Postings
Site Maps	Site Maps
Nomination Area	**Nominations**
Nomination	Nom
Nomination Quick Response	Nom QR
Request for Confirmation	Req for Conf
Confirmation Response	Conf Resp
Confirmation Response Quick Response	Conf Resp QR
Scheduled Quantity	Sched Qty
Scheduled Quantity for Operator	Sched Qty Oper
Flowing Gas Area	**Flowing Gas**
Pre-determined Allocation	PDA
Pre-determined Allocation Quick Response	PDA QR
Allocation	Allocation
Shipper Imbalance	Shipper Imbal
Measurement Information	Meas Info
Measured Volume Audit Statement	Meas Vol Audit
Authorization to Post Imbalances	Auth to Post Imbal
Posted Imbalances Download Post	Imbal Dwnld
Request for Imbalance Trade	Req for Imbal Trd
Request for Imbalance Trade Quick Response	Req for Imbal Trd QR
Withdrawal of Request for Imbalance Trade	W/D of Req for Imbal Trd
Request for Confirmation of Imbalance Trade	Req for Conf of Imbal Trd
Imbalance Trade Confirmation	Imbal Trd Conf
Imbalance Trade Notification	Imbal Trd Notify
Invoicing Area	**Invoicing**
Invoice	Invoice
Service Requester Level Charge/Allowance Invoice	Svc Req Invc
Payment Remittance	Pmt Remit
Statement of Account	Stmt of Acct
Capacity Release Area	**Capacity Release**
Offers	Offers
Bids	Bids
Awards	Awards
Contracts Area	**Contracts**

4.3.55 Where display information on a Customer Activities Web site is derivable from data provided in a previous upload or download, the information should not be included in the EDI/EDM standards [or FF/EDM standard, for later consideration] that directly correspond to the EBB/EDM Web page being displayed.

4.3.56 The industry should use common codes for location points and legal entities when communicating via EDI/EDM, EBB/EDM and/or FF/EDM. The corresponding common code name should also be used in EBB/EDM.

4.3.57 Customer Activities Web pages should support entry of the maximum length for valid data, however, display can be done in a manner to minimize left to right scrolling.

4.3.58 On Customer Activities Web pages, informational display fields can be displayed with related data.

4.3.59 Providers of Customer Activities Web sites should ensure that the site operates within the guidelines of the "Technical Characteristics of the Client Workstation" described in the Appendix of the Electronic Delivery Mechanism Related Standards Manual. This appendix, listing examples of hardware and software configurations that providers should meet, should be reviewed and updated by the Future Technology Task Force, at a minimum, by the spring of each year and presented to the NAESB WGQ Executive Committee for adoption by the June meeting of that committee.

4.3.60 Access to the Customer Activities Web Site should be protected by HTTP Basic Authentication or similar logon/password mechanism(s). A Customer Activities Web site should typically require a single logon/password pair for each user session.

4.3.61 Data communications for Customer Activities Web sites should utilize 128-bit Secure Sockets Layer (SSL) encryption.

4.3.62 Custom downloadable modules presented by a Customer Activities Web site should be signed by the author. The signatures on these modules should be communicated in advance to Web site users.

4.3.63 In the Navigational Area of the Informational Postings Web Site, the navigational link for "Customer Activities" should appear directly above the navigational link for "Site Map".

4.3.64 Moved and modified as Internet ET standard [10].3.22.

4.3.65 The Transportation Service Provider's Customer Activities Web Site should include the name, nickname, or name abbreviation of the parent company and/or Transportation Service Provider so that it will appear first in the browser title bar.

4.3.66 When the Form and the Matrix for Customer Activities Web sites are separate Web pages, a subset of the Form may be included by the Transportation Service Provider in the upper Content Area of the Matrix page.

4.3.67 A Transportation Service Provider which determines to provide new services which do not utilize existing transaction sets via NAESB WGQ EBB/EDM, should, prior to implementation, submit a request for standardization to NAESB WGQ including descriptions of the EBB/EDM, EDI/EDM and, as applicable, FF/EDM implementation.

4.3.68 On Customer Activities Web sites, information which is not part of the data dictionary may be displayed.

4.3.69 On Customer Activities Web sites, the following standard nomenclature should be used for processing functions, when the associated function is supported by the Transportation Service Provider (TSP). TSPs may also support additional processing functions.

Processing Function	Nomenclature
Create a new line item for data entry in the Matrix.	New
Copy existing data on a screen or window.	Copy

Delete the current line item from the Matrix, the screen or the window prior to Submit.	Delete
Back out of a screen or window without executing the process, which will cause the loss of all updates since the last Submit.	Cancel
Print application data.	Print
Send record/records from the Matrix to the TSP for processing.	Submit
Sort displayed records based on specified criteria.	Sort
Retrieve information from the TSP based on specified criteria.	Retrieve
Post a line item from the Form to the Matrix as a change to the current line item in the Matrix prior to Submit.	Change
Clear fields on the Form.	Clear
Post a line item from the Form to the Matrix as a new record.	Add
Provide information regarding the current page or function.	Help
Filter displayed records based on specified criteria.	Filter

4.3.70 Moved and modified as Internet ET standard [10].3.23.

4.3.71 Moved and modified as Internet ET standard [10].3.24.

4.3.72 Providers of Customer Activities Web sites, at their discretion, may provide alternate views to data and transactions in addition to the NAESB WGQ basic views (industry common views). The alternate views should not replace NAESB WGQ basic views and should be offered as separate views, if available. If an alternate view is offered, the NAESB WGQ basic view should be the default view and clearly labeled as the NAESB WGQ basic view. Any alternate views must offer the same business result as the basic view and be accessible to all applicable users. The basic views must offer the same business result as the alternate views and be accessible to all applicable users.

4.3.73 Data fields used to populate or control population of other fields can be placed before the fields to be populated. If these data elements apply to the entire Content Area they can appear in the Header. If the Transportation Service Provider elects to place such data fields in an order outside of the standardized order, the labels for these data fields should be distinguishable through visual cues from the labels of data elements in the standardized order.

4.3.74 Each data element which has been submitted for standardization in the NAESB WGQ process should follow the NAESB WGQ ordered data elements on the Form within a data group selected by the Transportation Service Provider.

4.3.75 The sub-categories and the labels for the category of Flowing Gas should appear, if applicable, in the Navigational Area as follows:

Pre-determined Allocation
Allocation
Imbalance
Measurement

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.76 On a Customer Activities Web page, where the Form and the Matrix are combined, any data groupings and ordering for the corresponding Form should apply.

4.3.77 [Deleted]

4.3.78 When a Form and a Matrix exist for a Customer Activities Web page, a mechanism should exist to populate the Form with data from a selected item in the Matrix.

4.3.79 The sub-categories and the labels for the category of Invoicing should appear, if applicable, in the Navigational Area as follows:

Invoice
Payment Remittance
Statement of Account

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.80 NAESB WGQ FF/EDM flat files should be formatted as ASCII comma separated value (CSV) files. This means:

Rows are separated by a carriage return/line feed (CRLF).
Fields are separated by commas.
When a field contains a comma, the field should be enclosed by double-quotes.
Double-quotes should not be used within any data field.
When numeric data is negative, the minus sign should precede the number.
When numeric data contains decimal precision, the decimal point should be included within the field.
When numeric data contains one or more significant leading zeros, these zeros should be preserved in the flat file.
Date fields should be formatted as YYYYMMDD.
Time fields should be specified in a 24 hour format, formatted as HH:MM or HH:MM:SS, as applicable.
Date/Time fields should be formatted as YYYYMMDD HH:MM or YYYYMMDD HH:MM:SS when date and time are expressed in one NAESB WGQ data element. Note that there should be exactly one space between the day (DD) and the hour (HH).
The maximum amount of data to be placed in a field should be limited to 256 characters.
When a field contains no data, the empty field should result in two delimiters next to each other. Note that there should be no blank spaces between the delimiters.

4.3.81 For a NAESB WGQ FF/EDM flat file, the first row of the file should be comprised of the standard abbreviations for NAESB WGQ data elements, including any additional data elements added per NAESB WGQ Standard No. 4.3.52, in the order in which the corresponding data is to appear in all subsequent rows. The data element order is at the option of the sender. If a data element abbreviation is not recognized, the entire flat file should be rejected.

4.3.82 For NAESB WGQ FF/EDM flat files, each transaction (e.g. nomination) should be contained in a single row.

4.3.83 For Interactive Flat File EDM, 128-bit Secure Sockets Layer (SSL) encryption should be used.

4.3.84 Access to Interactive Flat File EDM should be protected by HTTP Basic Authentication.

4.3.85 The sub-categories and the labels for the category of Capacity Release should appear, if applicable, in the Navigational Area as follows:

Offers
Bids
Awards

Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.

4.3.86 To the extent that multiple electronic delivery mechanisms are used, the same business result should occur.

4.3.87 When the receiver of:

1) a Nomination,
2) a Pre-determined Allocation, or,
3) a Request for Confirmation,

has determined to change the business rule(s) it will apply to the processing of (and/or response to) one or more of these documents; or, when the sender of:

1) a Confirmation Response (solicited and unsolicited),
2) a Scheduled Quantity,
3) a Scheduled Quantity for Operator,
4) an Allocation,
5) a Shipper Imbalance, or,
6) an Invoice

has determined to change the business rule(s) it will apply to the generating of (and/or content within) one or more of these documents, then it should notify its trading partners of same at least two weeks in advance of the change(s). The notification should include identification of the data element(s) that are changing (or whose content is changing), the intended business result of such change(s) in the business rule(s), and the effective date of such change(s).

For the purposes of this standard, a business rule change is any change in:

a) the presence and/or the acceptable content of a data element which is received by the trading partner sending notice;
b) a new business response to an accepted data element which is received by the trading partner sending notice;

c) a new business response to the acceptable content of a data element which is received by the trading partner sending notice; or,
d) a new intended business result to be communicated to a receiver by the trading partner sending notice;

Absent mutual agreement between the affected trading partners to the contrary, trading partners notifying their sending or receiving trading partners of a change(s) under this standard should provide the means to test such change(s) during at least a two week time period prior to the effective date of the change(s).

Trading partners receiving notice of such change(s) from their trading partner should be prepared not to implement such change(s) even after testing has been completed, as the notifying trading partner is permitted to cancel or postpone such change(s). Notifying trading partners canceling or postponing the effective date of change(s) should provide affected trading partners with notice of cancellation or postponement at least one business day prior to the applicable effective date.

4.3.88 Moved and modified as Internet ET standard [10].3.25.

4.3.s1 A Transportation Service Provider (TSP) should provide on its Informational Postings Web Site a link to the natural gas quality tariff provisions (or where no tariff exists in the general terms and conditions) or a simple reference guide to such information.

4.3.s2 The Transportation Service Provider (TSP) should provide on its Informational Postings Web Site daily average gas quality information for prior gas day(s), to the extent available, for location(s) that are representative of mainline gas flow. The information available for the identified location(s) should be provided in a downloadable format. Information should be reported in units as specified in the tariff or general terms and conditions. In any event, compliance with gas quality requirements is in accordance with the TSP's tariff or general terms and conditions.

The following are examples of gas quality attributes that could be included in the posting for the applicable Gas Day(s) and location(s):

- Heating Value
- Hydrocarbon Components, % of C1 – Cnn, as used in determining Heating Value
- Specific Gravity
- Water
- Nitrogen
- Carbon Dioxide
- Oxygen
- Hydrogen
- Helium
- Total Sulfur
- Hydrogen Sulfide
- Carbonyl Sulfide
- Mercaptans
- Mercury and/or any other contaminants being measured
- Other pertinent gas quality information that is specified in the TSP's tariff or the general terms and conditions.

4.3.s3 Data provided pursuant to NAESB WGQ Standard No. [S2] should be made available on the Transportation Service Provider's Web Site for the most recent three-month period. Beyond the initial three-month period, the historical data should be made available offline in accordance with regulatory requirements.

4.3.s4 Data provided pursuant to NAESB WGQ Standard No. [S2] should be provided in a tabular downloadable file to be described by the Transportation Service Provider. The first row of the file should contain the column headers.

Interpretations:

NAESB WGQ has adopted the following interpretations of standards that relate to Electronic Delivery Mechanism Related Standards implementation:

7.3.24 Does the language of NAESB WGQ Standards 2.3.14, 2.3.26, 3.3.15 and 4.3.4 mean that contractual audit rights are excluded from the six-month time limitation and that no statement adjustments can be made after the six-month period? In addition, is NAESB WGQ recommending that audit rights be excluded from contracts or otherwise limited in contracts to a six-month period? Interpretation:
Audit rights, to the extent they exist in a contract are contractual rights within the meaning of NAESB WGQ Standards 2.3.14, 2.3.26, 3.3.15, and 4.3.4. Further, the NAESB WGQ standards make no finding or recommendation with respect to the advisability of including or excluding audit rights, specifying audit timing or specifying the timing of subsequent audit corrections in a contract.

7.3.35 According to NAESB WGQ Standard 4.3.6, notices are now supposed to be posted on the Transportation Service Providers' (TSP) Web pages. Does this mean that a TSP is not required to provide any alternative form of communication for notices such as telephone or fax, particularly for those notices issued outside of business hours and on weekends? According to NAESB WGQ Standard 4.3.6, notices (critical notices, operation notices, system wide notices, etc.) are supposed to be posted on the Transportation Service Providers' (TSP) Web pages. Does this mean that a TSP is not required to provide any alternative form of communication for these specified notices?

Interpretation:
NAESB WGQ Standard 4.3.6 does not specify any alternative means of notification aside from the Web page nor does it specify that the only means of notification is by means of the Web page. Alternative means of notification for particular information may be required by regulation, tariff or other NAESB WGQ standards. For example notices pertaining to system wide events of both a critical and non-critical nature (NAESB WGQ Standard 5.3.18) are implemented via both downloads (NAESB WGQ Standard 5.4.16) and the Web pages (NAESB WGQ Standard 4.3.6).

7.3.50 Moved to Internet ET.

D. Quadrant Electronic Delivery Mechanism Related Standards by Function

This section restates the Principles, Definitions, Standards, and Interpretations shown in Section C, but regroups them by function.

General QEDM Related:

4.1.2 The WGQ Quadrant Electronic Delivery Mechanism does not pick winners, rather it should create an environment where the marketplace can dictate a winner or winners.

4.1.3 The solutions should be cost effective, simple and economical.

4.1.4 The solutions should provide for a seamless marketplace for natural gas.

4.1.6 Data providers (Transportation Service Providers) should interface with third party vendors according to NAESB WGQ standards.

4.1.7 Electronic communications between parties should be done on a nondiscriminatory basis, whether through an agent or directly with any party.

4.1.9 Service providers should post clear and precise business processing rules at the designated site, or in writing upon request.

4.1.10 There should be at least one standard (computer-to-computer exchange of transactional data) for data exchange format.

4.1.12 Protocols and tools that parties elect to support should be “Internet-compatible”.

4.1.p1 For any location(s), the Transportation Service Provider (TSP) may, at its discretion, elect to provide gas quality information in addition to that specified in NAESB WGQ Standard No. [S2]. The TSP may choose how to provide the information.

4.2.20 Testing data sets between trading partners includes testing of:
1. intended business results,
2. Internet ET, and
3. related EDI/EDM and, where supported, FF/EDM implementation issues.

Testing should include enveloping, security, data validity, and standards compliance (e.g. ANSI X12 and NAESB WGQ QEDM Related Standards).

4.3.1 All parties sending and receiving data should accept a TCP/IP connection. At a minimum, sending and receiving parties should designate an Internet address for the receipt and delivery of NAESB WGQ standardized data sets.

4.3.2 On time stamping, data leaves control of the originator by the same time (deadline), regardless of mechanism (3rd party service provider time stamp is acceptable) and 15 minutes of communication time should be available to allow accumulation of all transactions to the pipeline.

4.3.3 Originating party is any system originating/creating the document reflecting the transaction to be submitted (this could also include a third-party service provider or a transportation service provider's EBB). Within the 15-minute window the transaction should be received by the receiving party. Errors in transmission shall be governed by the terms and conditions of the trading partner agreement between the parties. The receiving party may also waive the 15-minute window requirement at its own discretion.

4.3.4 Trading partners should retain transactional data for at least 24 months for audit purposes.

This data retention requirement only applies to the ability to recover or regenerate electronic records for a period of two years and does not otherwise modify statutory, regulatory, or contractual record retention requirements.

4.3.5 Documents that are made available on the Transportation Service Provider's Web site should be downloadable on demand in a NAESB WGQ specified electronic structure.

4.3.39 Each implementation of a current proprietary business function category on EBBs should remain available until such time as that business function category is tested and implemented via a Customer Activities Web site.

4.3.52 A Transportation Service Provider (TSP) which determines to provide new features utilizing existing transaction sets via NAESB WGQ EBB/EDM, for each transaction upon inception of support for such service, should:
- If NAESB WGQ EDI/EDM or FF/EDM standards exist for the transaction set, provide the service via NAESB WGQ EDI/EDM, or FF/EDM or both, utilizing modifications defined by the TSP to the existing file structures;
and,
- Submit a request for modification or enhancement of the transaction set to NAESB WGQ including details of the interim EBB/EDM, EDI/EDM and/or FF/EDM implementation.

4.3.53 Where a Transportation Service Provider (TSP) utilizes a subset of available NAESB WGQ code values for specific data elements for inbound documents to the TSP, the TSP should make available a list of the supported code values in a download utilizing a NAESB WGQ electronic format.

4.3.56 The industry should use common codes for location points and legal entities when communicating via EDI/EDM, EBB/EDM and/or FF/EDM. The corresponding common code name should also be used in EBB/EDM.

4.3.67 A Transportation Service Provider which determines to provide new services which do not utilize existing transaction sets via NAESB WGQ EBB/EDM, should, prior to implementation, submit a request for standardization to NAESB WGQ including descriptions of the EBB/EDM, EDI/EDM and, as applicable, FF/EDM implementation.

4.3.74 Each data element which has been submitted for standardization in the NAESB WGQ process should follow the NAESB WGQ ordered data elements on the Form within a data group selected by the Transportation Service Provider.

4.3.s3 Data provided pursuant to NAESB WGQ Standard No. [S2] should be made available on

the Transportation Service Provider's Web Site for the most recent three-month period. Beyond the initial three-month period, the historical data should be made available offline in accordance with regulatory requirements.

4.3.s4 Data provided pursuant to NAESB WGQ Standard No. [S2] should be provided in a tabular downloadable file to be described by the Transportation Service Provider. The first row of the file should contain the column headers.

7.3.24 Does the language of NAESB WGQ Standards 2.3.14, 2.3.26, 3.3.15 and 4.3.4 mean that contractual audit rights are excluded from the six-month time limitation and that no statement adjustments can be made after the six-month period? In addition, is NAESB WGQ recommending that audit rights be excluded from contracts or otherwise limited in contracts to a six-month period?

Interpretation:
Audit rights, to the extent they exist in a contract are contractual rights within the meaning of NAESB WGQ Standards 2.3.14, 2.3.26, 3.3.15, and 4.3.4. Further, the NAESB WGQ standards make no finding or recommendation with respect to the advisability of including or excluding audit rights, specifying audit timing or specifying the timing of subsequent audit corrections in a contract.

7.3.35 According to NAESB WGQ Standard 4.3.6, notices are now supposed to be posted on the Transportation Service Providers' (TSP) Web pages. Does this mean that a TSP is not required to provide any alternative form of communication for notices such as telephone or fax, particularly for those notices issued outside of business hours and on weekends? According to NAESB WGQ Standard 4.3.6, notices (critical notices, operation notices, system wide notices, etc.) are supposed to be posted on the Transportation Service Providers' (TSP) Web pages. Does this mean that a TSP is not required to provide any alternative form of communication for these specified notices?

Interpretation:
NAESB WGQ Standard 4.3.6 does not specify any alternative means of notification aside from the Web page nor does it specify that the only means of notification is by means of the Web page. Alternative means of notification for particular information may be required by regulation, tariff or other NAESB WGQ standards. For example notices pertaining to system wide events of both a critical and non-critical nature (NAESB WGQ Standard 5.3.18) are implemented via both downloads (NAESB WGQ Standard 5.4.16) and the Web pages (NAESB WGQ Standard 4.3.6).

Internet EDI/EDM Related:
(Majority of information is located in the Internet Electronic Transport Book)

4.2.11 "NAESB WGQ EDI/EDM" is the term used to describe ANSI ASC X12 computer-to-computer electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards in the NAESB WGQ Implementation Guides and communicated between trading partners over the Internet using the NAESB Internet Electronic Transport.

Informational Postings Related:

4.1.16 Informational Postings Web Sites should be easy to locate.

4.1.17 Information within an Informational Postings Web Site should be easy to locate.

4.1.18 Information across Informational Postings Web Sites should be consistently displayed.

4.1.19 Information across Informational Postings Web Sites should be easy to download.

4.2.1 "Informational Postings" is the term that identifies common information as specified in WGQ Standard 4.3.23. (Per Order 2004; Changed during the 5/6/2004 EC Meeting)

4.3.16 On the Informational Postings website, the Index of Customers document may be displayed in HTML or RTF and should be downloadable in a defined, tab-delimited ASCII text file, with provisions for title information and footnote capability, as set forth in Code of Federal Regulations Part 284, Section 223. (Reference Order Number 637, Docket No. RM98-10-000, issued February 9, 2000, "Appendix A, Instruction Manual for Electronic Filing of the Index of Customers" issued pursuant to the above referenced order.)

4.3.17 "Informational Postings" should be the label used for navigation to or within the Web site.

4.3.23 Transportation Service Providers should establish an Informational Postings Web site accessible via the Internet. The subcategories and labels for the categories of Informational Postings should be as follows:

CATEGORIES	**SUBCATEGORIES**
Capacity	Operationally Available
	Unsubscribed
Energy Affiliate Info	Capacity Allocation Log (when applicable)
	Employee Transfers
	Names and Addresses
	Potential Mergers
	Shared Facilities
Gas Quality	
Index of Customers	
Non-discrimination Rqts	Discounts
	Emergency Deviations
	Implementation Procedures
	Information Disclosure
	Tariff Discretionary Actions
Notices	Critical
	Non-Critical
	Planned Outage Service
Organizational Charts	
Posted Imbalances	
Tariff	Title Page
	Table of Contents
	Preliminary Statement
	Map

Currently Effective Rates
Rate Schedules
General Terms and Conditions
Form of Service Agreement
Entire Tariff
Sheet Index

Transactional Reporting

These categories and labels should appear in the order specified above and before any others.

4.3.24 The Transportation Service Provider's Informational Postings Web Site should include the name, nickname, or name abbreviation of the Transportation Service Provider so that it will appear first in the browser title bar. Content Area documents should have a similar name when printed.

4.3.30 The links to categories of Informational Postings should be displayed vertically on the left (Navigational Area) of the screen at all times.

4.3.31 With regard to Informational Postings, when using abbreviations to display column and field names, the following abbreviations should be used:

Available	Avail
Capacity	Cap
Date/Time	D/T
Description	Desc
Effective	Eff
Location	Loc
Quantity	Qty
Maximum Daily Quantity	MDQ
Maximum Storage Quantity	MSQ

4.3.63 In the Navigational Area of the Informational Postings Web Site, the navigational link for "Customer Activities" should appear directly above the navigational link for "Site Map".

4.3.s1 A Transportation Service Provider (TSP) should provide on its Informational Postings Web Site a link to the natural gas quality tariff provisions (or where no tariff exists in the general terms and conditions) or a simple reference guide to such information.

4.3.s2 The Transportation Service Provider (TSP) should provide on its Informational Postings Web Site daily average gas quality information for prior gas day(s), to the extent available, for location(s) that are representative of mainline gas flow. The information available for the identified location(s) should be provided in a downloadable format. Information should be reported in units as specified in the tariff or general terms and conditions. In any event, compliance with gas quality requirements is in accordance with the TSP's tariff or general terms and conditions.

The following are examples of gas quality attributes that could be included in the posting for the applicable Gas Day(s) and location(s):

- Heating Value
- Hydrocarbon Components, % of C1 – Cnn, as used in determining Heating Value
- Specific Gravity
- Water
- Nitrogen
- Carbon Dioxide
- Oxygen
- Hydrogen
- Helium
- Total Sulfur
- Hydrogen Sulfide
- Carbonyl Sulfide
- Mercaptans
- Mercury and/or any other contaminants being measured
- Other pertinent gas quality information that is specified in the TSP's tariff or the general terms and conditions.

Internet EBB/EDM - Customer Activities Web sites:

4.1.13 Regarding the request that EBBs need to provide the ability to create and print specialized reports, the data should be made available so as to permit the users of the information to download the data to be used in their applications.

4.1.20 Display space for content on Web sites should be maximized.

4.1.21 On the Web sites, the use of scrolling, especially left to right, should be minimized.

4.1.22 Web site standards should not preclude various levels of user response and inter-activity. Minimum levels of user response or inter-activity should be developed.

4.1.23 Web site standards should not dictate or limit back-end development technology or systems. Industry Web sites should be accessible by a Standard Client Configuration.

4.1.24 Standardized Web site navigational structure should be developed to provide access to business functions. The hierarchical relationship, structure and order for navigation on the Web site should be established in a standardized manner.

4.1.26 Customer Activities Web sites should be designed for ease of user interaction.

4.1.27 There should generally be a one-to-one relationship between data elements used for EDI and/or flat files and the data displayed on Customer Activities Web pages.

4.1.28 Standard field name descriptors or abbreviations, and navigation and functional screen layouts should be used on all Customer Activities Web pages. There should be no standards for font size, colors, etc. Functional screen layouts should be developed as standards which would divide each transactional screen into separate areas and define which data elements belong in each specific area.

4.1.29 Information that is constant for the displayed Content Area may be placed in the page Header.

4.1.30 Data elements that have default values may be placed last to minimize scrolling.

4.1.31 As a general guideline, the initial phase of each business function category (of a multiple phase implementation) of “common look and feel” for Internet transactions that are not currently standardized should begin subsequent to the implementation of the currently standardized data sets to the Web. This does not preclude the implementation of new standardized data sets as they become available.

4.1.32 There is displayed information on Customer Activities Web sites which does not have a comparable data element in EDI; however, the data (e.g. totals, reports, calculations) is derived from other EDI data elements. Provision of such information does not require the development of an EDI data set to accomplish a one-to-one match. However, any Customer Activities Web function should be derivable from information available in EDI data sets.

4.1.33 When standardized, all elements used in standard EBB/EDM, EDI/EDM and FF/EDM should be defined in the related NAESB WGQ x.4.z standard.

4.1.36 Trading partners should maintain redundant connections to the public Internet for NAESB WGQ EDM Web sites, which include all NAESB WGQ standardized Internet communication. These redundant connections should be topographically diverse (duality of) paths to minimize the probability of a single port of failure.

4.1.39 Trading Partners should mutually select and utilize a version of the NAESB WGQ EDM standards under which to operate, unless specified otherwise by government agencies. Trading Partners should also mutually agree to adopt later versions of the NAESB WGQ EDM standards, as needed, again unless specified otherwise by government agencies.

4.2.2 "Download" is the term used to describe the retrieval of information from a Web site in a format suitable for storage.

4.2.3 "Display" is the term used to describe the typical visual presentation derived by a browser as a result of retrieval of information from a given URL.

4.2.4 "Printing" is the term used to describe the typical printed layout derived when a document is printed from a display tool (browser, word processor, etc.).

4.2.5 "Site Map" is the term used to describe a Web page of URL links, which resembles a table of contents or directory tree structure, of categories and subcategories of information.

4.2.6 "Central Address Repository" (CAR) is the term used to describe: 1) the Web site providing links to all Transportation Service Providers' Informational Postings, and 2) the entity administering and maintaining the above Web site and repository.

4.2.7 "Navigational Area" is the term used to describe the area on the left side of the browser display providing links to the Content Area and other navigational links. Navigational Area is not required to be displayed on Customer Activities Web pages where data entry, reporting or inquiry are displayed.

4.2.8 "Content Area" is the term used to describe the area directly to the right of the Navigational Area of the browser display. When the Navigational Area is not displayed the entire browser display is content area.

4.2.9 “Standard Client Configuration” is the term used to describe the configuration that allows simultaneous access to multiple industry Web sites.

4.2.10 “Customer Activities” is the term used to refer to the business function categories relating to Nominations, Flowing Gas, Invoicing, Capacity Release, Contracts and other business functions on industry Web sites.

4.2.13 “NAESB WGQ EBB/EDM” is the term used to describe the NAESB WGQ standardized electronic interchange of information for Customer Activities Internet Web site presentations.

4.2.14 “Header” is the term used to describe the area at the top of the Content Area of the browser display.

4.2.15 “Detail” is the term used to describe the area directly below the Header in the Content Area of the browser display.

4.2.16 “Form” is the term used to describe the portion of the Content Area of the browser display on Customer Activities Web sites used for single transaction entry or display as well as, optionally, data selection. The Form should be either in the upper portion of the Content Area or, alternatively, a single page linked to the Matrix.

4.2.17 “Matrix” is the term used to describe the portion of the Content Area of the browser display on the Customer Activities Web sites used to display selected data entered on the Form and, when appropriate, for data entry. The Matrix should be either the lower portion of the Content Area (that area below the Form) or, alternatively, a single page linked to the Form.

4.3.18 Transportation Service Providers should provide and keep current to the Central Address Repository the addresses (URLs) for the following in a specified format and communication method(s):

Informational Postings
Capacity
Energy Affiliate Info
Index of Customers
Notices
Standards of Conduct Info
Tariff
Downloads
Site Map

4.3.19 The Central Address Repository should make available a consolidated repository of the Transportation Service Providers' current URLs listed in NAESB WGQ Standard 4.3.18 in two ways:

1) a vehicle to link to sites and categories, and

2) a downloadable list.

4.3.20 A user ID or password should not be required to access the Central Address Repository or the Transportation Service Provider's Informational Postings Web Site.

4.3.22 The following navigational links should appear last in the Navigational Area and be labeled as follows:

Downloads
Search
Site Map

4.3.25 The Site Map should be provided in the Content Area and should include links to all levels of categories described in NAESB WGQ Standard 4.3.23. Each level of category and subcategory should be indented to show its relationship and should be presented in text form to best utilize space.

4.3.26 Transportation Service Providers should provide search capability for a word or phrase within the text, headers, and footers of the entire tariff and within any of the following tariff subcategories: 1) Rate Schedules, 2) General Terms and Conditions, and 3) Form of Service Agreement. The results of the search should provide a list of links to the pages containing the word or phrase. "Search" should appear as a link and be labeled as such, appearing immediately above the Site Map link.

4.3.27 The "Notices" category (as shown in the Navigational Area) should expand to a list of subcategories (in the Navigational Area) when clicked; there are no display requirements for the Content Area. Each of these subcategories, when clicked, should display a list of notices for that subcategory in the Content Area.

4.3.28 For the subcategories of Notices, the first column headings in the Content Area should be Notice Type, Posted Date/Time, Notice Effective Date/Time (and Notice End Date/Time, when applicable), Notice Identifier (optional*), Subject and Response Date/Time, when applicable, with the list sorted in reverse chronological order by Posted Date/Time.
* When used as a reference, the Notice Identifier should be displayed.

4.3.29 The words or labels that should appear in the "Notice Type" column in NAESB WGQ Standard 4.3.28 should be:

Words	**Labels**
Capacity Constraint	Cap. Constraint
Capacity Discount	Cap. Discount
Curtailment	Curtailment
Force Majeure	Force Majeure
Intraday Bump	Bump
Maintenance	Maintenance

Operational Flow Order	OFO
Phone List	Phone List
Press Release, Company News	News
Other	Other

4.3.32 Each line of the Table of Contents of the Tariff should provide a link to a corresponding sheet by clicking on the sheet number shown. The subcategories Currently Effective Rates, Rate Schedules, General Terms and Conditions, and Form of Service Agreement should provide either a table of contents or a similar breakdown, when applicable, and a link function to a corresponding sheet. For example, if General Terms and Conditions has a separate table of contents, it should provide corresponding links.

4.3.33 For Tariff documents, "previous" and "next" links should be displayed at the top of each HTML document. If the "previous" and "next" links may scroll off the display, they should also be provided at the bottom of the HTML document.

4.3.34 Columns and data fields that would contain data not supported by the Transportation Service Provider should be eliminated on display and/or entry, and left empty on download.

4.3.35 For the “Index of Customers”, the column headings for the web site display for the “Index of Customers” should be displayed in the order provided for in reference Order No. 637, Docket No. RM98-10-000, issued February 9, 2000, “Appendix A, Instruction Manual for Electronic Filing of the Index of Customers” issued June 29, 2000, pursuant to the above referenced order, for those fields identified as “detail fields”. In addition, the other “Index of Customers” information not included in the columnar display should be accessible from the columnar display.

4.3.36 Internet protocols should be used for accessing all industry business functions.

4.3.38 Industry Web sites should be accessible via the public Internet using common browser software.

4.3.40 Standard navigation should be used to access all business functions on industry Web sites.

4.3.41 Navigation through the industry Web site menus should be consistent for location and technique.

4.3.42 The categories and the labels for Customer Activities Web sites should appear, if applicable, in the Navigational Area as follows:

Nominations
Flowing Gas
Invoicing
Capacity Release
Contracts
Informational Postings
Site Map

Links supporting Mutually Agreeable categories should precede Informational Postings

4.3.43 The sub-categories and the labels for the category of Nominations should appear, if applicable, in the Navigational Area as follows:

Nomination
Confirmation
Scheduled Quantity

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.44 A Customer Activities Web page may display information (data elements and code values) from multiple functionally related NAESB WGQ EDI data sets (i.e. nominated quantities and scheduled quantities may appear on the same Web screen).

4.3.45 NAESB WGQ standard code value descriptions should be displayed for code values where appropriate.

4.3.46 The Customer Activities Web Site should include the name, nickname, or name abbreviation of the Transportation Service Provider in the browser title bar. The name of the business function should be displayed in the Header.

4.3.47 Where they exist for the same business function, flat files and EDI should use the same nomenclature for data set names, data element names, code values and/or code value descriptions, abbreviations and message text. Corresponding Web pages should use data set names, data element names, code value descriptions, abbreviations and message text that correspond to those used in flat files and EDI, where they exist.

4.3.48 Totals, when appropriate, should be displayed within the Content Area of the Web page in a manner which distinguishes them from the data.

4.3.49 Where navigation and/or processing functions exist for a Customer Activity, the Content Area should contain navigation in the Header on the left and processing functions in the Header on the right.

4.3.50 Navigation for input data lookups, if provided, should be placed near the field being looked up. Navigation for informational lookups, if provided, should be included in the Header.

4.3.51 NAESB WGQ Common Codes for entity and location should be available for data validation or selection (viewing) on a Customer Activities Web site and in a standardized downloadable format for use by customers and third party service providers. Cross-references to proprietary codes may be provided on a mutually agreeable basis.

4.3.54 With regard to the navigational links on Customer Activities Web sites, when using abbreviations, the following should be used:

Full Name	Abbreviation
Customer Activities	**Customer Activities**
Nominations	Nominations
Flowing Gas	Flowing Gas
Invoicing	Invoicing
Capacity Release	Capacity Release
Contracts	Contracts
Informational Postings	Info Postings
Site Maps	Site Maps

Nomination Area	**Nominations**
Nomination	Nom
Nomination Quick Response	Nom QR
Request for Confirmation	Req for Conf
Confirmation Response	Conf Resp
Confirmation Response Quick Response	Conf Resp QR
Scheduled Quantity	Sched Qty
Scheduled Quantity for Operator	Sched Qty Oper
Flowing Gas Area	**Flowing Gas**
Pre-determined Allocation	PDA
Pre-determined Allocation Quick Response	PDA QR
Allocation	Allocation
Shipper Imbalance	Shipper Imbal
Measurement Information	Meas Info
Measured Volume Audit Statement	Meas Vol Audit
Authorization to Post Imbalances	Auth to Post Imbal
Posted Imbalances Download Post	Imbal Dwnld
Request for Imbalance Trade	Req for Imbal Trd
Request for Imbalance Trade Quick Response	Req for Imbal Trd QR
Withdrawal of Request for Imbalance Trade	W/D of Req for Imbal Trd
Request for Confirmation of Imbalance Trade	Req for Conf of Imbal Trd
Imbalance Trade Confirmation	Imbal Trd Conf
Imbalance Trade Notification	Imbal Trd Notify

Invoicing Area	**Invoicing**
Invoice	Invoice
Service Requester Level Charge/Allowance Invoice	Svc Req Invc
Payment Remittance	Pmt Remit
Statement of Account	Stmt of Acct
Capacity Release Area	**Capacity Release**
Offers	Offers
Bids	Bids
Awards	Awards
Contracts Area	**Contracts**

4.3.55 Where display information on a Customer Activities Web site is derivable from data provided in a previous upload or download, the information should not be included in the EDI/EDM standards [or FF/EDM standard, for later consideration] that directly correspond to the EBB/EDM Web page being displayed.

4.3.57 Customer Activities Web pages should support entry of the maximum length for valid data, however, display can be done in a manner to minimize left to right scrolling.

4.3.58 On Customer Activities Web pages, informational display fields can be displayed with related data.

4.3.59 Providers of Customer Activities Web sites should ensure that the site operates within the guidelines of the "Technical Characteristics of the Client Workstation" described in the Appendix of the Electronic Delivery Mechanism Related Standards Manual. This appendix, listing examples of hardware and software configurations that providers should meet, should be reviewed and updated by the Future Technology Task Force, at a minimum, by the spring of each year and presented to the NAESB WGQ Executive Committee for adoption by the June meeting of that committee.

4.3.65 The Transportation Service Provider's Customer Activities Web Site should include the name, nickname, or name abbreviation of the parent company and/or Transportation Service Provider so that it will appear first in the browser title bar.

4.3.66 When the Form and the Matrix for Customer Activities Web sites are separate Web pages, a subset of the Form may be included by the Transportation Service Provider in the upper Content Area of the Matrix page.

4.3.68 On Customer Activities Web sites, information which is not part of the data dictionary may be displayed.

4.3.69 On Customer Activities Web sites, the following standard nomenclature should be used for processing functions, when the associated function is supported by the Transportation Service Provider (TSP). TSPs may also support additional processing functions.

Processing Function	Nomenclature
Create a new line item for data entry in the Matrix.	New
Copy existing data on a screen or window.	Copy
Delete the current line item from the Matrix, the screen or the window prior to Submit.	Delete
Back out of a screen or window without executing the process, which will cause the loss of all updates since the last Submit.	Cancel
Print application data.	Print
Send record/records from the Matrix to the TSP for processing.	Submit
Sort displayed records based on specified criteria.	Sort
Retrieve information from the TSP based on specified criteria.	Retrieve
Post a line item from the Form to the Matrix as a change to the current line item in the Matrix prior to Submit.	Change
Clear fields on the Form.	Clear
Post a line item from the Form to the Matrix as a new record.	Add
Provide information regarding the current page or function.	Help

Filter displayed records based on specified criteria.	Filter

4.3.72 Providers of Customer Activities Web sites, at their discretion, may provide alternate views to data and transactions in addition to the NAESB WGQ basic views (industry common views). The alternate views should not replace NAESB WGQ basic views and should be offered as separate views, if available. If an alternate view is offered, the NAESB WGQ basic view should be the default view and clearly labeled as the NAESB WGQ basic view. Any alternate views must offer the same business result as the basic view and be accessible to all applicable users. The basic views must offer the same business result as the alternate views and be accessible to all applicable users.

4.3.73 Data fields used to populate or control population of other fields can be placed before the fields to be populated. If these data elements apply to the entire Content Area they can appear in the Header. If the Transportation Service Provider elects to place such data fields in an order outside of the standardized order, the labels for these data fields should be distinguishable through visual cues from the labels of data elements in the standardized order.

4.3.75 The sub-categories and the labels for the category of Flowing Gas should appear, if applicable, in the Navigational Area as follows:

Pre-determined Allocation
Allocation
Imbalance
Measurement

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.76 On a Customer Activities Web page, where the Form and the Matrix are combined, any data groupings and ordering for the corresponding Form should apply.

4.3.78 When a Form and a Matrix exist for a Customer Activities Web page, a mechanism should exist to populate the Form with data from a selected item in the Matrix.

4.3.79 The sub-categories and the labels for the category of Invoicing should appear, if applicable, in the Navigational Area as follows:

Invoice
Payment Remittance
Statement of Account

Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

4.3.85 The sub-categories and the labels for the category of Capacity Release should appear, if applicable, in the Navigational Area as follows:

Offers
Bids
Awards

Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.

4.3.86 To the extent that multiple electronic delivery mechanisms are used, the same business result should occur.

4.3.87 When the receiver of:

1) a Nomination,
2) a Pre-determined Allocation, or,
3) a Request for Confirmation,

has determined to change the business rule(s) it will apply to the processing of (and/or response to) one or more of these documents; or, when the sender of:

1) a Confirmation Response (solicited and unsolicited),
2) a Scheduled Quantity,
3) a Scheduled Quantity for Operator,
4) an Allocation,
5) a Shipper Imbalance, or,
6) an Invoice

has determined to change the business rule(s) it will apply to the generating of (and/or content within) one or more of these documents, then it should notify its trading partners of same at least two weeks in advance of the change(s). The notification should include identification of the data element(s) that are changing (or whose content is changing), the intended business result of such change(s) in the business rule(s), and the effective date of such change(s).

For the purposes of this standard, a business rule change is any change in:

a) the presence and/or the acceptable content of a data element which is received by the trading partner sending notice;
b) a new business response to an accepted data element which is received by the trading partner sending notice;
c) a new business response to the acceptable content of a data element which is received by the trading partner sending notice; or,
d) a new intended business result to be communicated to a receiver by the trading partner sending notice;

Absent mutual agreement between the affected trading partners to the contrary, trading partners notifying their sending or receiving trading partners of a change(s) under this standard should provide the means to test such change(s) during at least a two week time period prior to the effective date of the change(s).

Trading partners receiving notice of such change(s) from their trading partner should be prepared not to implement such change(s) even after testing has been completed, as the notifying trading partner is permitted to cancel or postpone such change(s). Notifying trading partners canceling or postponing the effective date of change(s) should provide affected trading partners with notice of cancellation or postponement at least one business day prior to the applicable effective date.

Internet FF/EDM:

4.2.12 "NAESB WGQ FF/EDM" is the term used to describe a standardized flat file electronic data interchange of information in files as mapped from the x.4.z NAESB WGQ standards. NAESB WGQ FF/EDM is communicated between trading partners over the Internet using the NAESB Internet Electronic Transport.

4.1.34 For NAESB WGQ FF/EDM, the content and usage of flat files should reasonably correspond to the NAESB WGQ data sets used for NAESB WGQ EDI/EDM.

4.1.35 If NAESB WGQ FF/EDM is implemented, flat files should be exchanged via the NAESB WGQ EDI/EDM site or the Customer Activities Web site.

4.1.38 Until such time as NAESB WGQ standardizes field lengths for data elements, data element field lengths for FF/EDM should not exceed the corresponding field lengths defined for EDI/EDM as defined in the ANSI ASC X12 version in the NAESB WGQ implementation guide in which the NAESB WGQ data element was adopted.

4.2.18 "Batch Flat File" is the term used within NAESB WGQ FF/EDM to describe the automated computer-to-computer transfer of flat files.

4.2.19 "Interactive Flat File" is the term used within NAESB WGQ FF/EDM to describe the transfer of flat files using an interactive browser.

4.3.80 NAESB WGQ FF/EDM flat files should be formatted as ASCII comma separated value (CSV) files. This means:

Rows are separated by a carriage return/line feed (CRLF).

Fields are separated by commas.

When a field contains a comma, the field should be enclosed by double-quotes.

Double-quotes should not be used within any data field.

When numeric data is negative, the minus sign should precede the number.

When numeric data contains decimal precision, the decimal point should be included within the field.

When numeric data contains one or more significant leading zeros, these zeros should be preserved in the flat file.

Date fields should be formatted as YYYYMMDD.

Time fields should be specified in a 24 hour format, formatted as HH:MM or HH:MM:SS, as applicable.

Date/Time fields should be formatted as YYYYMMDD HH:MM or YYYYMMDD HH:MM:SS when date and time are expressed in one NAESB WGQ data element. Note that there should be exactly one space between the day (DD) and the hour (HH).

The maximum amount of data to be placed in a field should be limited to 256 characters.

When a field contains no data, the empty field should result in two delimiters next to each other. Note that there should be no blank spaces between the delimiters.

4.3.81 For a NAESB WGQ FF/EDM flat file, the first row of the file should be comprised of the standard abbreviations for NAESB WGQ data elements, including any additional data elements added per NAESB WGQ Standard No. 4.3.52, in the order in which the corresponding data is to appear in all subsequent rows. The data element order is at the option of the sender. If a data element abbreviation is not recognized, the entire flat file should be rejected.

4.3.82 For NAESB WGQ FF/EDM flat files, each transaction (e.g. nomination) should be contained in a single row.

Security:

4.1.15 The North American Energy Standards Board Wholesale Gas Quadrant should not set standards for site-level security. Individual organization security standards should be relied upon.

4.1.37 Transportation Service Provider EDM implementations should minimize the number of outbound ports required to be opened on the client-side firewall.

4.3.60 Access to the Customer Activities Web Site should be protected by HTTP Basic Authentication or similar logon/password mechanism(s). A Customer Activities Web site should typically require a single logon/password pair for each user session.

4.3.61 Data communications for Customer Activities Web sites should utilize 128-bit Secure Sockets Layer (SSL) encryption.

4.3.62 Custom downloadable modules presented by a Customer Activities Web site should be signed by the author. The signatures on these modules should be communicated in advance to Web site users.

4.3.83 For Interactive Flat File EDM, 128-bit Secure Sockets Layer (SSL) encryption should be used.

4.3.84 Access to Interactive Flat File EDM should be protected by HTTP Basic Authentication.

RELATED STANDARDS

Common Codes

A decision made in 1993 by a FERC-established standards development group (EBB Working Group 5) resulted in a location coding system which cross-references proprietary point codes to a common industry-supported location code. This common location code, called the GRID Code, was developed based on the American Petroleum Institute (API) well code model. The FERC, in Order 563-A, directed the industry to establish any necessary relationships and to proceed with the implementation of the GRID Code. To achieve this implementation, in August 1994 trade associations representing three segments of the natural gas industry entered into an agreement with Petroleum Information Corporation (PI) to develop and maintain the PI *GRID*™ Common Code database. As GISB prepared standards for capacity release (July 1995) and nominations (September 1995), GISB fully endorsed the use of the PI *GRID*™ common codes.

However, after extensive consideration by GISB's Common Code Subcommittee, GISB adopted, on September 30, 1996, a new Common Code for Gas Transaction Points, the NAESB WGQ/PI Data Reference Number (generally referred to as "DRN"). The DRN is a one-to-nine digit, non-intelligent number also assigned by IHS (successor to PI), which has a one-to-one relationship with the PI *GRID*™ Code. For more information, access the NAESB Web Page at www.naesb.org.

In keeping with the trends in other industries involved with EDI, EBB Working Group 5 recommended the acceptance of the D-U-N-S®[1] Number as a common company identifier. This recommendation was also adopted in FERC Order 563-A. The D-U-N-S® Number is assigned to companies by the Dun & Bradstreet Corporation (D&B). Similarly, as GISB prepared standards for capacity release (July 1995) and nominations (September 1995), GISB fully endorsed the use of the D-U-N-S® Number common code.

For NAESB WGQ Common Code purposes, an entity will use one and only one D-U-N-S® Number. Entity common codes should be "legal entities," that is, Ultimate Location, Headquarters Location, and/or Single Location (in Dun & Bradstreet Corporation ("D&B") terms). However, in the following situations, a Branch Location (in D&B terms) can also be an entity common code: 1. When the contracting party provides a D-U-N-S® Number at the Branch Location level; or 2. to accommodate accounting for an entity that is identified at the Branch Location level. Since D&B offers customers the option of carrying more than one D-U-N-S® Number per entity, please refer to NAESB's Web Page at www.naesb.org for directions on determining the one and only one D-U-N-S® Number constituting the NAESB WGQ Entity Common Code.

In the datasets, an asterisk by a data element means that it is a "common code," so the field will reflect the industry-supported common code for location or company.

NAESB WGQ Electronic Data Interchange Trading Partner Agreement

In 1998, GISB adopted Standard 6.3.3, the NAESB WGQ Electronic Data Interchange Trading Partner Agreement (TPA) for exchange of data within the gas industry. The NAESB WGQ TPA

1 D-U-N-S® is a registered trademark of Dun & Bradstreet, Inc.

defines the relationship of the sender and receiver of NAESB WGQ Standard ASC X12 documents. This agreement represents a complete set of balanced terms which a company should accept whether it is sender or receiver of electronic documents. It has established all the data items necessary to exchange electronic documents in a step by step, fill in the blank model form. The use of the TPA minimizes preparation, negotiation and review time. In addition, the Internet ET specifies a Technical Exchange Worksheet. Copies of this agreement may be obtained from the NAESB office or may be downloaded from the NAESB home page at www.naesb.org.

Party Roles

In all of the transaction sets, there are multiple parties that may be involved in the transaction. There are the Transportation Service Provider (a.k.a. Pipeline or Transporter), the Service Requester (a.k.a. Shipper), Service Requester Agent (a.k.a. Shipper's Agent) and Third Party Service Provider (a.k.a. Third Party Agent). It is important to distinguish between the role of the Service Requester Agent and the Third Party Service Provider.

The Service Requester Agent is the party contractually authorized by the Service Requester to submit business transactions to the Transportation Service Provider on behalf of the Service Requester for a service requester contract. Once the Service Requester Agent is contractually authorized, the agent becomes the Service Requester for subsequent business transactions unless and until the agency relationship is terminated.

The Third Party Service Provider is the communications agent that the Service Requester or Service Requester Agent may subscribe to in order to send and receive transactions with the Transportation Service Provider.

It is possible that a single entity may, at times, provide the role of a Service Requester Agent for one party while providing the role of Third Party Service Provider for another party. Likewise, a single entity could be both Service Requester Agent and Third Party Service Provider for a single party.

In EDI implementation, the party that is authorized to send and receive transactions will be the party identified in the transmission envelope (ISA Header Segment). In all cases, the Transportation Service Provider, Service Requester and Service Requester Agent (if applicable) will be identified in the body of the transaction (N1 Name Segment).

ANSI ASC X12 Standards

The NAESB WGQ standards reflect an industry utilization of the American National Standards Institute (ANSI) ASC X12 standards maintained by the Data Interchange Standards Association, Inc. (DISA). The technical implementation documents included in this manual reflect the NAESB WGQ subset of the ANSI ASC X12 standards versions. It is recommended that any industry participant who wishes to utilize the ANSI ASC X12 standards should also have a copy of the ANSI ASC X12 Standards Reference document for a full understanding of the X12 requirements. NAESB members may purchase an ANSI reference document through NAESB by contacting the NAESB office. Non-NAESB industry participants may purchase the reference document by contacting:

Manager of Publications
DISA
7600 Leesburg Pike, Suite 430
Falls Church, VA 22043 USA
Voice: 703.970.4480
Fax: 703.970.4488
Email: info@disa.org

www.disa.org

As a member of ANSI, NAESB WGQ will utilize the ANSI ASC X12 standards and remain in full compliance. In all standards, occasions arise where the standard does not fully meet a need. NAESB WGQ recognizes this and will add interim usages and code values when required. When NAESB WGQ utilizes an interim solution, NAESB WGQ will apply to ANSI and the appropriate ANSI organizations for acceptance of the interim solution. ANSI's final solution may provide a usage or code value different than the interim solution. NAESB WGQ standards will be updated to reflect the final solution.

The architecture of ASC X12 is designed for end–to-end communications. The translator that generates the ASC X12 file and envelope will assign control numbers and counts that will appear within the ISA/IEA segments of the transaction and within the GS/GE segments of the transaction. These numbers and counts allow the translator to ensure that all of the segments in an envelope and all of the data elements in an envelope have been received and that the transmission was complete.

ISA contents

The ISA segment marks the beginning of an X12 document. It can be equated to an envelope that a paper document would come in via the mail. The envelope may contain one or more functional groups (defined by the GS segment) and one or more transaction sets.

The ISA is the interchange control segment to be utilized on all NAESB WGQ X12 standards. The segment identifies the Sender and Receiver of the document. The Interchange Sender ID/Interchange Receiver ID is published by both the Sender and Receiver for other parties to use as the Sender/Receiver ID to route data to them. The Sender must always code the Sender's ID in the Sender element and the designated Receiver's ID in the Receiver ID. Many times this may be the common code identifier. Sender and Receiver information is specified in the NAESB WGQ Electronic Data Interchange Trading Partner Agreement.

There are additional elements in the ISA segment that are traditionally assigned by the Sending party's translator. These elements inform the Receiver of the date/time that the envelope was generated, the X12 version number being utilized, whether the transmission is for test or production purposes, and what characters were used to designate the end of a sub element, element or segment. Different characters must be chosen for the sub element, element and segment delimiters. These delimiting characters must never appear in the data.

For more information on the ISA segment and the possible values for its elements, contact DISA or consult the appropriate version of the ANSI ASC X12 Standards Reference document corresponding to the NAESB WGQ transaction set being sent/received. Information about control segments (including the ISA and IEA) can be found in the Overview/Introduction and Control Standards sections of the ANSI Reference document. Specific information about the ISA and IEA

segments and corresponding elements can be found in the Segment Directory and Data Element Dictionary sections.

GS contents

The GS segment indicates the beginning of a functional group and provides control information for the data that follows it. A functional group can be defined as a group of transactions related to one business application. Within a mailing envelope, there may be a bundle of information relating to imbalances and a bundle of information relating to measurement information. Each of these 'bundles' is sent within its own (or a separate) GS Functional Group Header and a GE Functional Group Trailer in the X12 environment. The Sender of a transmission provides the application Sender's code that the Receiver of the transmission will reflect back on acknowledging documents. The Receiver of a transmission provides the application Receiver's code that the Sender will include in the transmission for the Receiver to utilize in routing to internal applications. Group Control Numbers are originated and maintained by the Sender of the document.

For more information on the GS segment and the possible values for its elements, contact DISA or consult the appropriate version of the ANSI ASC X12 Standards Reference document corresponding to the NAESB WGQ transaction set being sent/received. Information about control segments (including the GS and GE) can be found in the Overview/Introduction and Control Standards sections of the ANSI Reference document. Specific information about the GS and GE segments and corresponding elements can be found in the Segment Directory and Data Element Dictionary sections.

997 Usage

The 997 Functional Acknowledgment is used to indicate the results of the syntactical analysis of the X12 documents. The documents include the transaction sets and functional groups with an ISA/IEA envelope for all data segments, ST to SE. This standard covers all of the X12 and NAESB WGQ standard criteria that the Receiver of the document has incorporated into the Receiver's translator. The translator may be set to accept all information into the Receiver's application processing, it may be set to accept only ANSI ASC X12 compliant information into the Receiver's application processing, or it may be set to accept only ANSI ASC X12 and NAESB WGQ compliant information into the Receiver's application processing. Compliance checking, in a translator, may be set to several levels. NAESB WGQ recommends that compliance checking be set to the element level in the Functional Acknowledgement.

The 997 informs the Sender whether the translator accepted the file, accepted it with errors, or rejected it. When errors occur, the 997 identifies the level and type of error that was encountered. Once a transaction passes the translator, the 997 is sent to the Sender of the transaction and the data (if accepted) is passed on to the Receiver's business application for processing.

Hypertext Transfer Protocol (HTTP)

The Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. It is a generic, stateless, object-oriented protocol, which can be used for many tasks, such as name servers and distributed object management systems, through extension of its request methods (commands). A feature of HTTP is the typing of

data representation, allowing systems to be built independently of the data being transferred. Appendix A contains a listing of the HTTP version(s) supported by NAESB WGQ QEDM.

HTTP Transaction Set Code Values

The following table contains a list of code values to be used with the transaction set data element, which is a mutually agreeable (MA) data element in the HTTP Request.

HTTP transaction-set Code Values	**NAESB WGQ Standard Number**	**Transaction Set Description**
G873NMST	1.4.1	Nomination
G874NMQR	1.4.2	Nomination Quick Response
G873RQCF	1.4.3	Request for Confirmation
G873RRFC	1.4.4	Confirmation Response
G873SQTS	1.4.5	Scheduled Quantity
G873SQOP	1.4.6	Scheduled Quantity for Operator
G874CRQR	1.4.7	Confirmation Response Quick Response
G860PDAL	2.4.1	Pre-determined Allocation
G865PDQR	2.4.2	Pre-determined Allocation - Quick Response
G865ALLC	2.4.3	Allocation
G811IMBL	2.4.4	Shipper Imbalance
G867MSIN	2.4.5	Measurement Information
G867MAUS	2.4.6	Measured Volume Audit Statement
G814RQIN	2.4.7	Request for Information
G814RRIN	2.4.8	Response to Request for Information
G811TSIN	3.4.1	Transportation/Sales Invoice
G820PYRM	3.4.2	Payment Remittance
G822STAC	3.4.3	Statement of Account
G811SRCA	3.4.4	Service Requester Level Charge/Allowance Invoice
G840CROF	5.4.1	Offer Download
G843CRBR	5.4.2	Bid Download
G843CRAN	5.4.3	Award Download
G832CRRC	5.4.4	Replacement Capacity
G843CRWD	5.4.5	Withdrawal Download

HTTP transaction-set Code Values	NAESB WGQ Standard Number	Transaction Set Description
G840UPWD	5.4.6	Withdrawal Upload
G840UDOF	5.4.7	Offer Upload
G843UDVL	5.4.8	Offer Upload Quick Response
G840UDRC	5.4.9	Offer Upload Notification
G843UDBC	5.4.10	Offer Upload Bidder Confirmation
G824UDCV	5.4.11	Offer Upload Bidder Confirmation Quick Response
G567UDFD	5.4.12	Offer Upload Final Disposition
G840OAUC	5.4.13	Operationally Available and Unsubscribed Capacity
G846UPRD	5.4.14	Upload of Request for Download of Posted Datasets
G846RURD	5.4.15	Response to Upload of Request for Download of Posted Datasets
G864SWNT	5.4.16	System-Wide Notices
G864CRNS	5.4.17	Note/Special Instruction
G843BDUP	5.4.18	Bid Upload
G843BDQR	5.4.19	Bid Upload Quick Response
G997FNAK	N/A	Functional Acknowledgement

TECHNICAL IMPLEMENTATION - INTERNET EDI/EDM & BATCH FF/EDM

Introduction

The NAESB Internet ET standards define the processes for the computer-to-computer exchange of information via the Internet. However, the NAESB Internet ET does not define the file formats that may be transferred. The WGQ QEDM defines two types of files that may be exchanged using the Internet ET standard: EDI and flat file. The EDI files are defined by NAESB WGQ standards in accordance with ANSI X12 standards. The flat file formats are the same flat file formats used in the NAESB WGQ Interactive Flat File standards.

WGQ QEDM-Specific Values for the Internet ET Data Dictionary

The Internet ET allows for specific 'input-format' file formats to be defined by each QEDM. The WGQ QEDM restricts the file formats to the list in the table below.

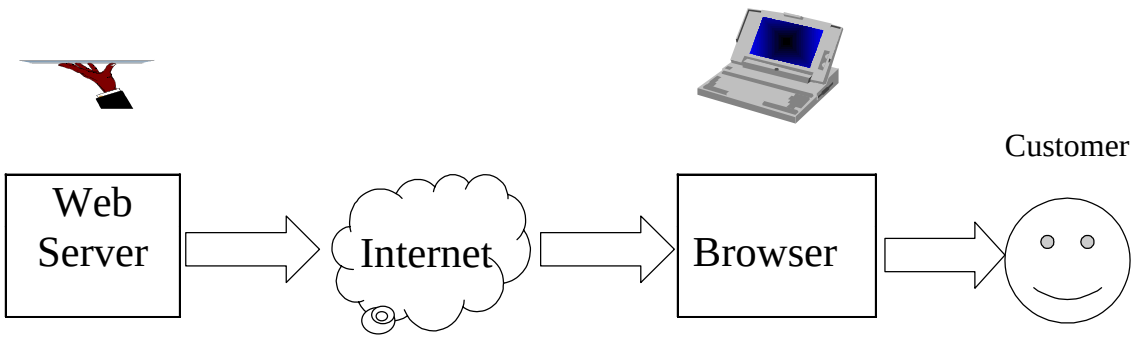
Business Name	Definition	Format	Usage*	Condition
input-format	Descriptor of the data format used for the file transmitted	**X12; FF; error**	in Request; M	NAESB standard format indicator used in file transmittal

TECHNICAL IMPLEMENTATION - INFORMATIONAL POSTINGS WEB SITE (IP/EDM)

Introduction

The scope of the standards for Informational Postings Web sites pertain to the public content posted on sites implemented by Transportation Service Providers. Public content is identified in NAESB WGQ Standard 4.3.23. Informational Postings Web site standards and guidelines also provide common accessibility of the Web site and its navigation (common "look and feel"). The standards do not attempt to dictate back office system technology or exact placement of data elements. However, the standards do specify the overall site layout, common navigation link terminology and order. Standards pertaining to minimum client configuration for Informational Postings Web sites can be found in Appendix C.

IP/EDM Flow Diagram



Parts of an Informational Postings Web Site

Title bar
This area, which in HTML is denoted by the <TITLE></TITLE> tags, always appears at the top of a page and as a label for minimized window that may appear on the task bar during a browser session. The manner in which the identification of the Transportation Service Provider should appear in the title bar is described in NAESB WGQ Standard 4.3.24.

Left Side - Navigational Area
NAESB WGQ Definition 4.2.7 describes the purpose of the left side of the browser display in the Informational Postings Web site.

Right Side - Content Area
NAESB WGQ Definition 4.2.8 addresses the area to the right of the navigational area. This area is typically used for displaying the documents such as the tariff information or lists of notices to which the user is led by the links appearing on the left.

Page Functions
In NAESB WGQ Standard 4.3.33, certain page navigation requirements are described for the tariff documents.

Page Format
There are multiple ways to separate the designated page sections in HTML. In general, the separate areas of Informational Postings Web sites should be implemented as independent "frames" so that areas can be scrolled independently.

Navigational Links - Terminology and Order of Placement
Throughout the Informational Postings/EDM standards, there are specific labels and ordering which establish the common navigation for all Informational Postings Web sites in the industry.

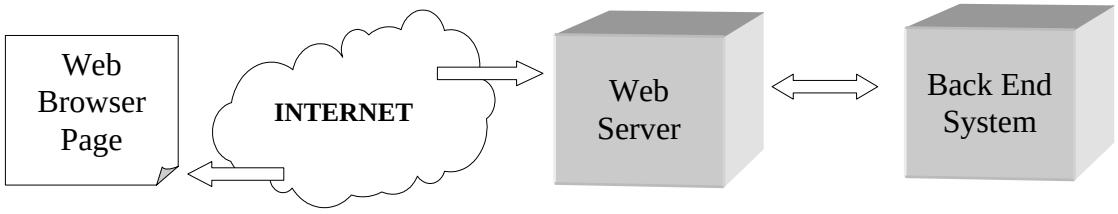
Page Access
As the type of information published in the Informational Postings Web site is customer non-specific and public, no password prompt is required. NAESB WGQ Standard 4.3.20 addresses this issue.

TECHNICAL IMPLEMENTATION - EBB/EDM

Introduction

EBB/EDM refers to the group of standards and business processes that relate to the implementation of the Customer Activities Web sites by Transportation Service Providers. NAESB WGQ standards for Customer Activities Web sites encompass common terminology, the order of data elements, placement of navigation and processing functions, user workstation technical characteristics, and Form and Matrix Areas. NAESB WGQ standards do not include the exact format of the screens, the level of user interactivity, and the technology of back office systems.

Flow Diagram

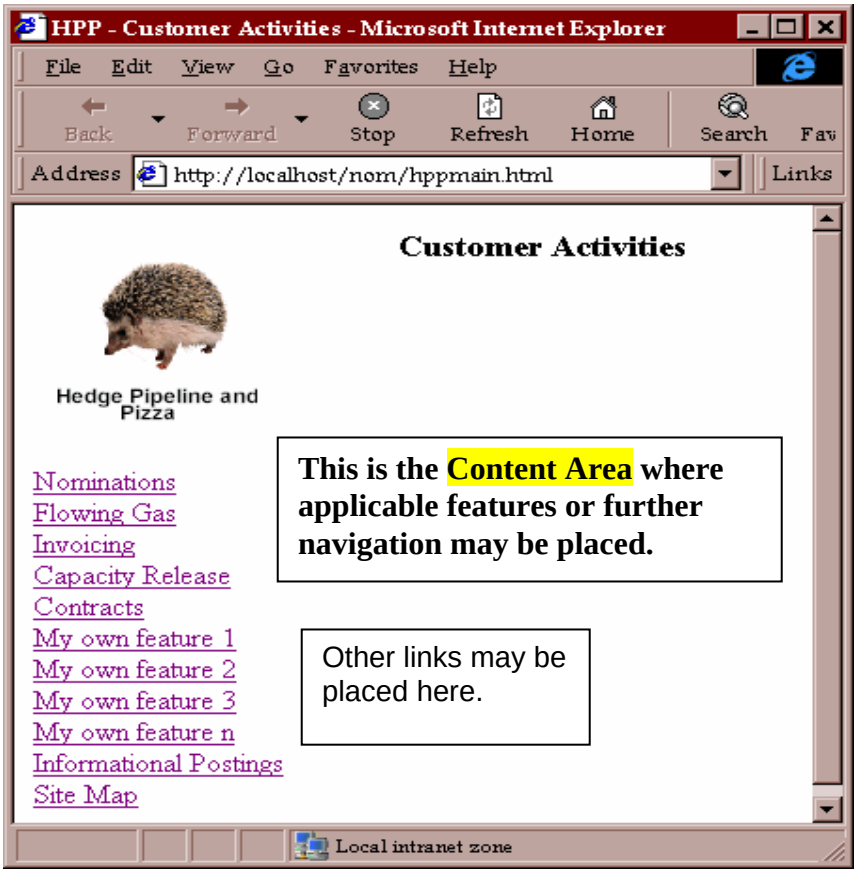


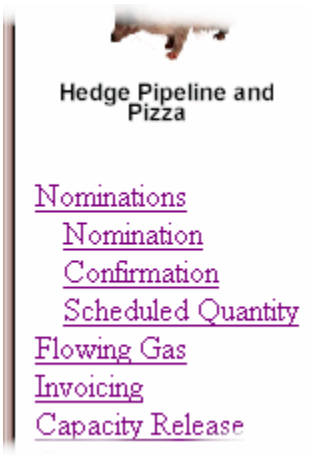
Customer Activities Web Site Overview

The Customer Activities Web pages contain the same two areas as the Informational Postings site; the Navigation Area and the Content Area. As described in NAESB WGQ standard 4.3.42, the top level navigation menu should include the following categories and labels, as applicable:

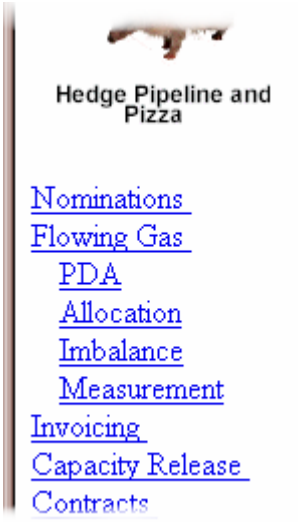
- Nominations
- Flowing Gas
- Invoicing
- Capacity Release
- Contracts
- Informational Postings
- Site Map

Each of these categories may provide a link to another set of links detailing the associated area. When additional features are placed within this menu, those features should be placed before the Informational Postings label/link. These links, as well as the general layout of the top-level page, may be seen in the example below. When a category does not have a subcategory, the link should directly navigate to the area described. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.

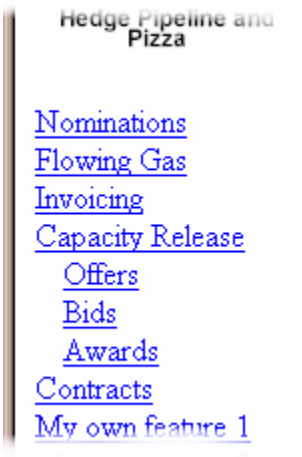




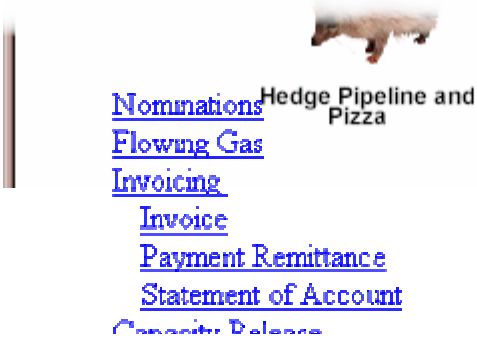
Nominations Sub-categories
The adjacent figure shows the Nomination category expanded to show each of its sub-categories.



Flowing Gas Sub-categories
The adjacent figure shows the Flowing Gas category expanded to show each of its sub-categories.



Capacity Release Sub-categories
The adjacent figure shows the Capacity Release category expanded to show each of its sub-categories.

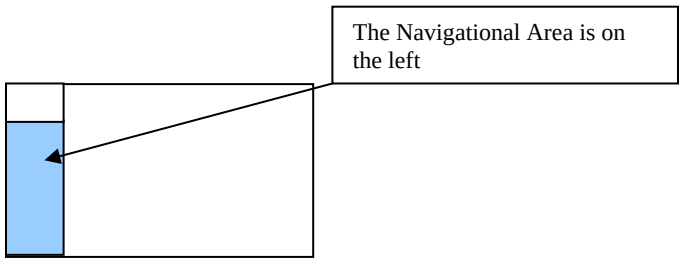


Invoicing Sub-categories
The adjacent figure shows the Invoicing category expanded to show each of its sub-categories.

The Parts of the Page

Navigational Area

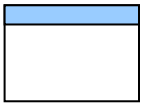
Customer Activities Web sites share many of the layout characteristics found in Informational Postings Web sites. The left hand menu is used for navigation to transactional pages. Implementation of this menu should include the categories and sub-categories shown in the Navigation section of this document, as applicable.



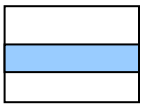
Layout on Transactional Pages of Customer Activities Web sites:

The transactional pages are in the Content Area of Customer Activities Web sites. The layout of transactional pages is divided into the following sections/areas:

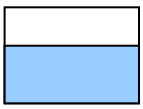
The Header – The area at the top of the Content Area where search criteria, navigation and processing functions may be displayed.



The Form – The area directly below the Header. The Form is used to display/edit a single item from the Matrix. Alternatively the Form may be a new page or window linked to a selection from the Matrix .



The Matrix – The area below the Form when the Form is on the same page as the Matrix. The Matrix is used to display a list of items for the page and may be used for update/edit. Alternatively, the Matrix may be a new page linked to the Form.

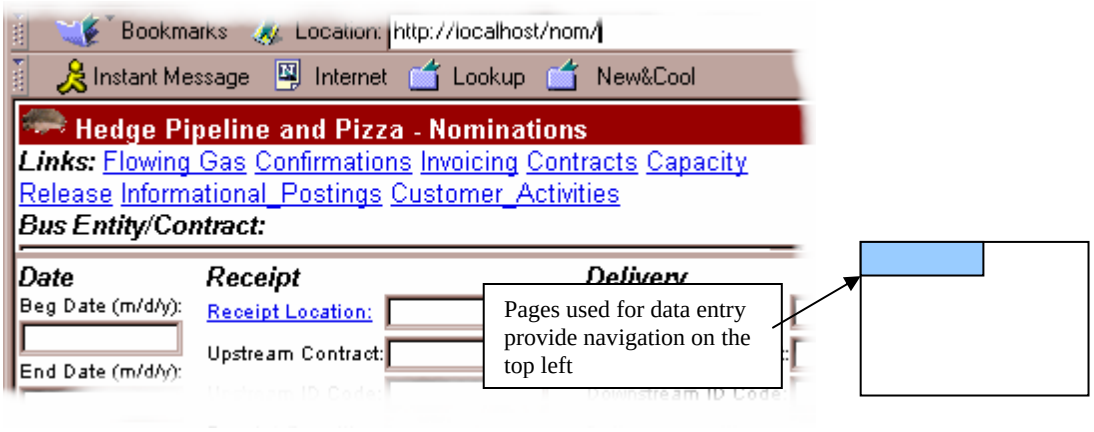


On the nominations screen, the Form and the Matrix may be combined into one, if no left and right scrolling is required to enter a nomination.

Navigation on Customer Activities Web Sites

Although the Navigational Area is provided on the left, many of the data entry pages may not accommodate space for a menu. In this instance, the navigation links may be placed on the upper left portion of the page. The number and type of links provided are not standardized.

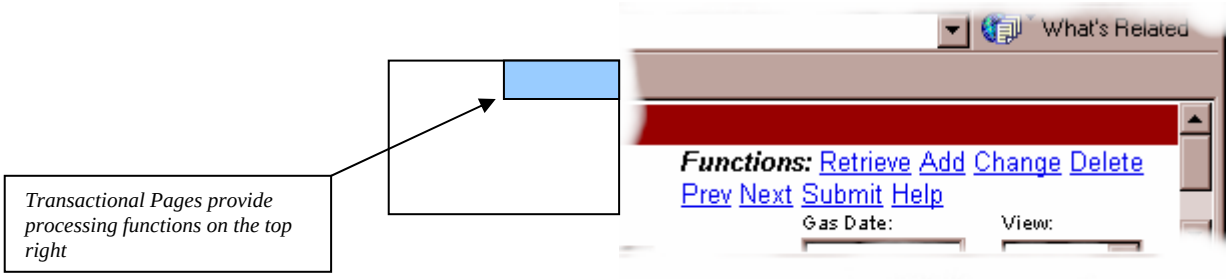
Example:



Processing Functions

Processing Functions vary between implementations of the transactional windows on Customer Activities Web sites. These functions should appear in the top right area of the page. A given function may or may not be used on any given site.

Example:



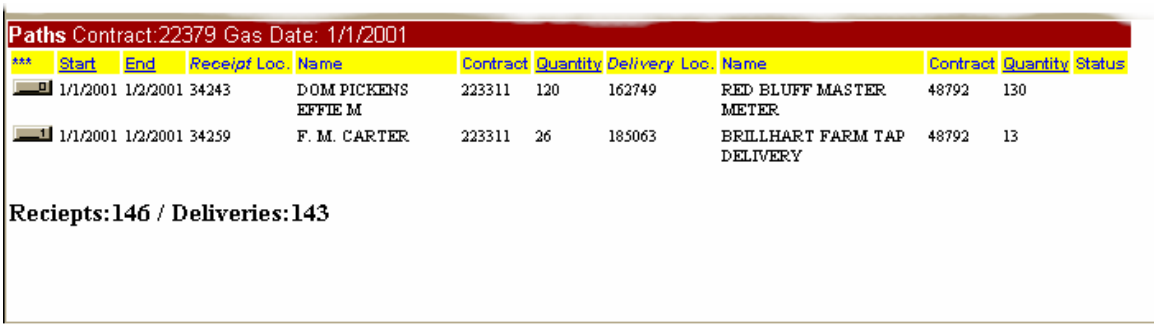
The Form

The Form area of a data entry page is the portion that holds a display, and sometimes entry/edit fields for a single selected row of data. The Form provides an area that displays the record without scrolling. The data in the Form can be populated when a record is selected from the Matrix. There are several technical implementations of this area, including:

- Implement the Form and Matrix in separate frames to allowing each to be displayed on the same page.
- Implement the Form and Matrix in separate linked pages allowing each to be displayed independently.
- Build the Form and the Matrix as integrated objects allowing communication between the displays on either one or multiple pages.
- Employ a script to populate input fields based on selections and their corresponding events on either one or multiple pages.

The Matrix

The Matrix is a formatted list of items allowing a user to select a given row/record. The selection can be accomplished by various mechanisms including a simple link, a button, or a JAVA® control. The order of the columns in this list is not standardized if a Form is provided. For the Nominations sample entry page below, the Matrix contains a list of nominations:



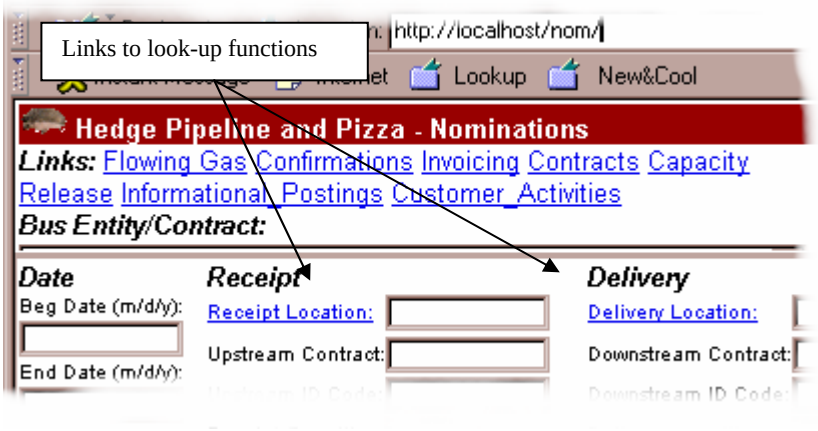
Paths Contract:22379 Gas Date: 1/1/2001

***	Start	End	*Receipt* Loc.	Name	Contract	Quantity	*Delivery* Loc.	Name	Contract	Quantity	Status
	1/1/2001	1/2/2001	34243	DOM PICKENS EFFIE M	223311	120	162749	RED BLUFF MASTER METER	48792	130	
	1/1/2001	1/2/2001	34259	F. M. CARTER	223311	26	185063	BRILLHART FARM TAP DELIVERY	48792	13	

Reciepts:146 / Deliveries:143

Look-ups

Look-ups are links associated with a function to that given value. For example, a Nominations page may require look-ups for receipt and delivery locations. A selector could 'pop-up' a device to search for a location value when the mouse pointer is near that value. Implementations of this feature include, but are not limited to, links that open another window with a structured search function.



Security

Firewalls

A firewall is one or more computers running special software designed to provide control of communications between two networks and prevent the availability of services and confidential internal data to unwelcome intruders from the Internet. Its purpose is to limit the types of services between the two networks. Often, a company's connection to the Internet is intended to provide other services to its employees who connect to an internal network such as a Local Area Network or Wide Area Network (LAN or WAN). Examples include access to the World Wide Web, use of e-mail, use of file transfer capabilities and publishing content intended for viewing by the external world on a Web server. In addition, the internal network will likely have connections to host computers which provide internal services such as file and print sharing, fax and database capabilities. There are two general mechanisms employed by firewalls to provide control: packet filtering and proxy services. Packet filtering examines important components of the messages such as the address of the sending and target computers and the designator (port number) for a specific application running on the target computer. Packet filtering can prevent access to specific computers or programs on those computers as well as reject messages from certain computers. Among other features, proxy servers act as relay agents that examine the attempted use of certain features within an application thus limiting access to these features. Proxy servers also hide (by substituting its own address) the internal addresses of clients communicating with external hosts making it difficult for potential attackers to focus on specific internal hosts. Because firewalls are designed to deal with a broad set of security issues, this guide does not attempt to provide specific implementation information.

Login and Encryption

Customer Activities Web sites should require a single logon/password pair for each user session. HTTP Basic Authentication or similar logon/password mechanism(s) using 128-bit encryption should protect access to Customer Activities Web sites. This may be implemented through any of the following techniques:

- 128-bit SSL
- 128-bit RSA JAVA® communications
- 128-bit Secure ICA®

Server Specifications – Ports

Servers should be configured to use one of the allowable TCP ports listed in Appendix D.

Transportation Service Provider EBB/EDM implementations should minimize the number of outbound ports that are required to be opened on the client side firewall. Each time a server application requires an additional open port, it is potentially necessary for the users of that site to open another outbound port. An effort has been made to provide a limited number of these ports, and a user should be able to use any Customer Activities Web site if all of these outbound ports have been provided.

Client Specifications*

General

A workstation configured in accordance with the hardware and software recommendations provided in Appendix B should be able to access any compliant Customer Activities Web site. Developers of Customer Activities Web sites should ensure that their applications run on a client workstation configured in accordance with Appendix B.

Browser Characteristics

HTML

Features of HTML including Frames, Tables, Style Sheets, DHTML, JavaScript, etc. and should be tested under any allowed browser. Features should not be provided that are only supported by a single browser. For example if a given DHTML tag is not available in all supported platforms it cannot be used, or the application must detect the variation in browser and accommodate the difference. The key to a successful implementation is to accommodate every function under all standard platforms using all standard browsers.

JAVA®

The standards allow for the use of a particular JAVA® version. This version is not normally provided with the common browsers, and compatibility may require the use of a JAVA® plug-in.

ICA®

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* **Technical implementations above represent a non-comprehensive set of choices which an implementer may use. This list in no way should be construed as an endorsement by NAESB WGQ of any specific products. Other products supporting the technical implementation may be used.**

In order to facilitate the transition of client server applications, an ICA® plug-in is allowed in the standard. This plug-in provides a remote image from the server. Since ICA® is not necessarily a Browser object, linking and menus may behave differently.

TECHNICAL IMPLEMENTATION - INTERACTIVE FF/EDM

Introduction

NAESB WGQ defines two ways in which flat files could be used to send transactions and transaction responses: interactive and batch. The batch process is described in the Internet ET. This section covers implementation considerations for the use of interactive flat files.

In general, interactive flat file communication is similar to EBB/EDM. For example, both involve human interaction and both use a Web browser and Web server to accomplish their purpose. Interactive FF/EDM differs from EBB/EDM in how the transaction data is formatted and prepared. EBB/EDM allows for direct Web page entry of data, while FF/EDM files contain data that has no structured interrelationship between its data records. FF/EDM files are typically prepared as part of a separate off-line process.

A variety of tools can be used to prepare flat files. However, the intent of the NAESB WGQ standards is to facilitate the preparation of flat files by creating standards that are consistent with how spreadsheets, or other tools, save files. Further, the standards were devised to avoid the need for programming (e.g., using spreadsheet macros) in order to create the file. The sender can choose the order of the data elements in the flat file. To maintain flexibility, the recipient must interpret the response in the order of the data elements provided by the Sender. This implies programming to interpret the received file on the part of the recipient.

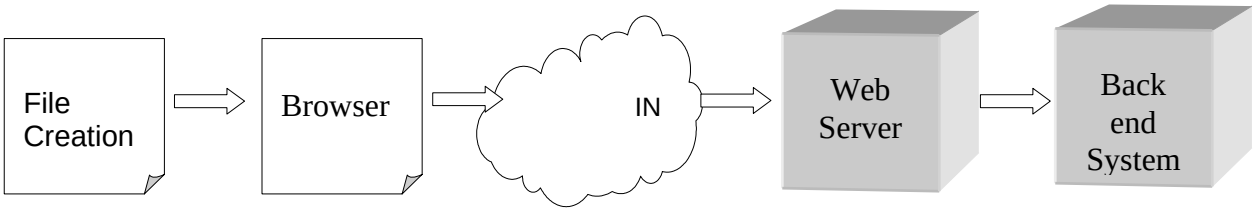
A receiver of a flat file may choose different mechanisms to respond to an interactively uploaded file. While NAESB WGQ has set no standards as to how this should be accomplished, an example response is an HTML screen which highlights any errors found. As another example, the response could be part of the same Web connection (HTTP round trip) or an asynchronous mechanism (e.g. notification via email or as results on a Web page).

FF/EDM employs Secure Sockets Layer - HTTPS (RFC 2246). Implementers of FF/EDM should refer to Appendix B - Minimum Technical Characteristics and Guidelines for the Developer and User of the Customer Activities Web Site. This portion of the guide assumes an HTTP multipart form file upload (see RFC 1867). Other implementations (e.g., custom JAVA JSP applet) are not described; however, some of the same considerations described below are applicable.

Flow Diagram

This paragraph and the following diagram depict a possible flat file upload process. The Sender portion of the flat file process is on the left and the Receiver portion is on the right. The Web server will prompt the Sender for a logon id and password. The Web browser and Web server cooperate to ensure encryption of the upload file and the response. The Web server may perform a certain amount of pre-validation before sending the file to the Receiver's backend system for further processing. When the backend system completes the processing, the results are then formatted, possibly as a file, email or an HTML response, and are sent back to the browser or the Sender. If errors are reported in these results, the user would correct them in the source document, resave the flat file and repeat the process. This process would continue until no errors are returned.

Sender's process to submit a file to the Receiver



Implementing Interactive FF/EDM Using a Web Page

NAESB WGQ standards do not specify the use of a Web page or determine the design of a Web page for Interactive FF/EDM. However, this section makes suggestions as to how Interactive FF/EDM could be implemented using a Web page or an Interactive Browser.

Header Area Left side

The top left side of the Web page can provide navigation to the Customer Activities home page and/or directly to some of its major menu items, similar to the Header section for EBB/EDM.

Header Area Right side

The top right side of the Web page can provide for invocation of page functions as it does for EBB/EDM. Since Interactive FF/EDM does not need many of the EBB/EDM functions, this portion of the page may be limited to such things as the submit function.

Forms Area

The Forms area for Interactive Flat File uploads will depend on how interactivity is implemented and whether optional response types are made available. Suggested data elements for the Forms area include:

- a text box to specify the file to be uploaded;
- a submit function as part of a multipart form;

- alternate response types if provided;
- a method for indicating the common codes of the sender and receiver;
- a transaction type;
- a file type and
- a transmission reference number.

An example of an Interactive FF/EDM Forms area is provided in a subsequent section of this document.

Page Functions

The submit function will have the effect of uploading the flat file for processing by the back end system. Depending upon the specific implementation, it may generate an acknowledgement of the receipt of the uploaded file, errors encountered in the pre-validation (if any) and/or the actual results of the backend processing (e.g., Quick Response).

Page Format

To accomplish a file upload, the Forms area must include a multi-part form, which requires special HTML values for the Form tag. Form tag/values are ENCTYPE="multipart/form-data", ACTION="scriptname" and METHOD="POST" where *scriptname* is the script or program which processes the upload file on the Web server. The form will also contain a tag specifying a file as a type of input such as the following: <input type="file" size="30" name="input-data">.

File Creation

The creation of the required flat file format may be possible without programming, for example by the use of a spreadsheet or text editor. The first row of the file is a “heading” row containing the names of the data elements being uploaded (see NAESB WGQ Standard 4.3.81). Subsequent rows of the spreadsheet contain data values (note NAESB WGQ Standard 4.3.82). When all data is entered, the file should be saved in an appropriate file type such as comma separated values (CSV).

Uploading Mechanism

If both EBB/EDM and Interactive FF/EDM are available, it may be useful to have submenus for each function under the appropriate NAESB WGQ standard menu. Once this menu is chosen, the user can be presented a Web page as described above.

Receipt Programming

Interpreting a multipart form upload

A multipart form is sent to the Web server using a layout described in the applicable Internet Request For Comment (RFC). The RFC describes how a multipart form allows the uploading of a variety of MIME types from a single form, one of which is a file type. As part of the upload, an HTTP header is sent indicating the string of characters which acts as a delimiter for each part of the upload form. If the form is processed by a receiving program (e.g., using C/C++, Perl or other), it

will have to parse the data using the RFC as a specification of data format.

Use of commercial components

For some Web servers, it may be possible to obtain a commercially available component which reduces the task of receiving an uploaded file to a simple object method and property syntax.

Assigning data element values (parsing the uploaded file)

Once the file has been successfully received by the Web server, it may be useful to pre-validate it as much as possible. To pre-validate, the individual elements of the file need to be parsed and stored. Assigning the data elements to the proper storage area is facilitated by the first row which provides standardized abbreviations (see NAESB WGQ Standard 4.3.81) for each position in the delimited file's records (or rows).

Pre-validations

At this stage it may be possible to reject the uploaded file for various reasons to avoid sending "garbage data" to the backend system. Possible rejection reasons include unrecognized header row data element name(s) or a binary data file. The goals of pre-validation are to avoid unnecessarily burdening of backend systems and to provide the fastest possible response to the user.

Synchronous vs. Asynchronous

Interactive FF/EDM may be implemented in a variety of ways. One type of implementation could be characterized as "synchronous" where the user waits for the reply from backend system validations as part of the same HTTP round trip. In other words, after pressing the submit button, the system returns to the browser a response confirming the receipt of the uploaded file followed by the validation response.

In contrast, an "asynchronous" implementation acknowledges receipt of the uploaded file and will make the results of the backend system validations available at a later time. The user may or may not be notified of the availability of the full validation response. If not notified, the user may periodically check a specified Web link for a list of available responses. NAESB WGQ does not specify how the EBB/EDM or Interactive FF/EDM accomplishes the receipt of a validation response.

Interface to the Backend System

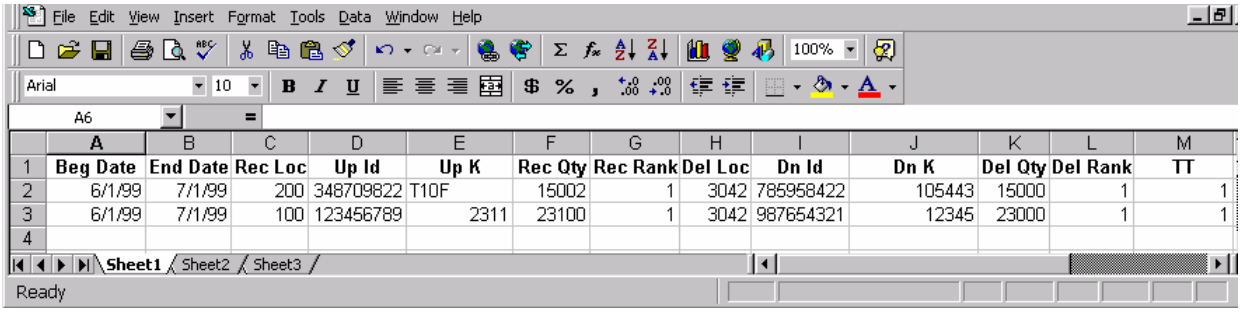
NAESB WGQ standards make no attempt to specify backend mechanisms. Typical implementations may include two-tier (traditional client/server applications), two-tier with data base stored procedures or three-tier.

Formatting the response

As previously mentioned, the response can be presented in an HTML screen or in a flat file. The response method may be based on an option provided to the sender on the upload form. Flat file responses must conform to the NAESB WGQ standards which include flexibility in the order of data elements within a record (or row).

Examples

Sample spreadsheet used to develop a flat file

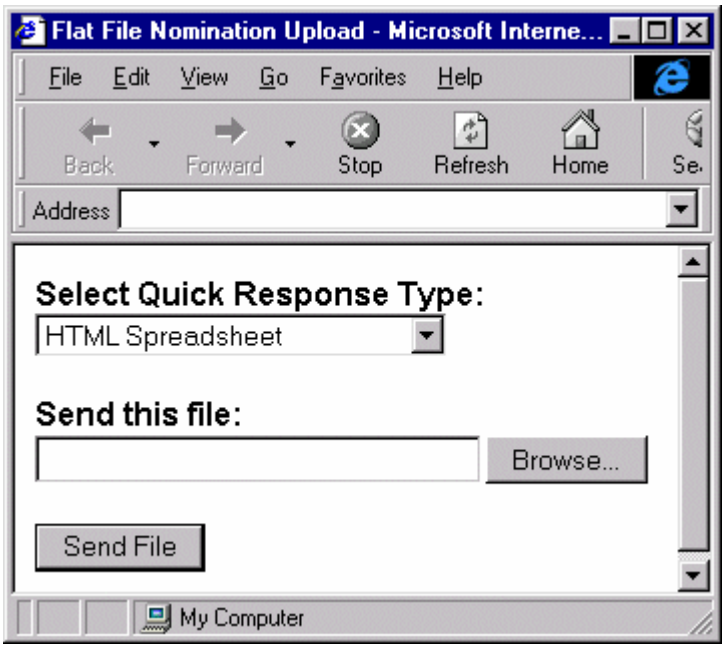


	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Beg Date	End Date	Rec Loc	Up Id	Up K	Rec Qty	Rec Rank	Del Loc	Dn Id	Dn K	Del Qty	Del Rank	TT
2	6/1/99	7/1/99	200	348709822	T10F	15002	1	3042	785958422	105443	15000	1	1
3	6/1/99	7/1/99	100	123456789	2311	23100	1	3042	987654321	12345	23000	1	1
4													

Flat file developed from a spreadsheet

Beg Date,End Date,Rec Loc,Up ID,Up K,Rec Qty,Rec Rank,Del Loc,Dn ID,Dn K,Del Qty,Del Rank,TT
19990601,19990701,200,348709822,T10F,15002,1,3042,785958422,105443,15000,1,1
19990601,19990701,100,123456789,2311,23100,1,3042,987654321,12345,23000,1,1

Sample HTML upload form



HTML for Sample Form

The following is the HTML for the above (note the user of multipart form and the post method):

```
<html>
<head>
<title>Flat File Nomination Upload</title>
</head>
        <form ENCTYPE="multipart/form-data" ACTION="ProcessUpload.asp" METHOD="POST">
                <p><strong>Select Quick Response Type: </strong><br>
                <select name="QRType" size="1">
                        <option value="Spreadsheet">HTML Spreadsheet</option>
                        <option value="Echo">HTML Echo of Input with Errors</option>
                        <option value="Tab">Tab Delimited Flat File</option>
                        <option value="Comma">Comma Delimited Flat File</option>
                        <option value="Fixed">Fixed Format Flat File</option>
                </select></p>
                <p><strong>Send this file:<br></strong>
                <input type="file" size="30" name="input-data"></p>
                <p><strong><input type="submit" value="Send File"></strong></p>
        </form>
</body>
</html>
```

Security

Authentication

NAESB WGQ Standard 4.3.84 calls for use of Basic Authentication, which is a standard part of the HTTP specification. Access to Interactive FF/EDM screens requires user-id and password. Login screens should be protected with Secure Socket Layer (SSL) encryption as described below.

Encryption

NAESB WGQ Standard 4.3.83 calls for the use of 128-bit encryption using Secure Socket Layer (SSL) technology. SSL is accomplished by obtaining a certificate from providers and using Web servers capable of using these certificates to accomplish SSL. Browsers specified in Appendix C are compatible with SSL mechanisms. Pages to be protected with SSL must be invoked with the HTTPS protocol by using “https” (versus “http”) as part of the hyperlink (HREF) name. The use of the HTTPS protocol requires the fully qualified URL rather than a relative link name.

APPENDIX A - Reference Guide

CGI

A source on CGI is a book entitled “Special Edition Using CGI” by Jeffrey Dwight and Michael Erwin.

Firewall Security

A source which covers this topic in detail is a book entitled "Firewalls and Internet Security: Repelling the Wily Hacker" by William Cheswick and Steven Bellovin.

NAESB

The NAESB Web Site: (http://www.naesb.org) is a primary reference for natural gas industry standards.

HTTP

The NAESB WGQ EDM architecture is based on HTTP 1.1, and all implementations should be compatible with this version.

W3C WorldWide Web Consortium. All aspects of HTTP, HTML, and other Web-related topics are documented at http://www.w3.org.

General information regarding HTTP an basic terminology is documented at http://www.w3.org/Protocols/HTTP/1.1/spec.html.

Syntax information for multipart can be found in IETF RFC1341 section 7.2. (http://www.ietf.org)

HTML

Before April 24, 1998, the recommended standard from the WorldWide Web Consortium was HTML 3.2. The specification for this standard can be found at http://www.w3.org/pub/WWW/TR/REC-html32.html.

Effective April 24, 1998, the WorldWide Web Consortium has made a recommendation for HTML 4.0. Information on HTML 4.0 may be found at http://www.w3.org/TR/REC-html40/.

http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html

http://www.interlink-2000.com/guide-to-publishing-html.html

Special Edition Using HTML, Second Edition, Mark Brown, John Jung, and Tom Savola, Que Corporation, 1996.

Time Synchronization

Time synchronization is required to assure that all trading partners transaction times are accurate. Time accuracy is dependent on how much a system’s clock drifts, how frequently it is resynchronized and the accuracy of the source used for synchronization.

Authoritative time synchronization is now being provided by governmental agencies around the world based on a synchronized network of atomic clocks. In the United States this includes the U. S. Naval Observatory and the National Institute of Standards and Technology.

One method of obtaining the current time is from the U. S. Naval Observatory's Web site at http://tycho.usno.navy.mil/cgi-bin/timer.pl. The output from this page can easily be edited and reformatted to set a local system's time. Commercial, shareware and public domain packages are also available to synchronize system times. Among them are NTP (which is an Internet standard), internet daytime, nisttime / usnotime.

Further information on time synchronization may be found at the following Web sites:

http://tycho.usno.navy.mil/ntp.html

http://www.ccd.bnl.gov/xntp

APPENDIX B - Minimum Technical Characteristics and Guidelines for the Developer and User of the Customer Activities Web Site[1]

Browser Characteristics (includes defined NAESB WGQ current versions):

Features as supported by the latest Generally Available (GA) versions of both Netscape®[2] and Internet Explorer®[3] within 9 months of such GA version becoming available, including -

- Frames & Nested Frames
- Tables & Nested Tables
- HTML
- Cookies
- JavaScript
- SSL 128-bit RSA Encryption
- Style Sheets

Plug-ins (GA versions within 9 months of such GA versions becoming available)

- JAVA®
- ActiveX® [4] (Plug-in for Netscape®)
- Adobe Acrobat Reader® [5]
- Systems Incorporated
- Independent Computer Architecture (ICA®) [6] - Protocol used for remote control access to an application

Operating Systems:

Operating systems on a client workstation should be multithreaded and pre-emptive.

Hardware:

CPU	>=500 MHz
Memory	>=256 MB Physical
Display Resolution	>=1024 x 768, 16K colors
Connection	>=56 KB

1 Configuration shown indicates a minimum except where a specific level is established. 'Minimum' implies a level where a reasonable experience for the user may be achieved. These levels also indicate the level that a user may expect that a client has been tested. Results may be less than satisfactory, or may preclude use of a site, if the user chooses to use anything less than those levels shown.

2 Netscape® is a registered trademark of Netscape Communications Corp.

3 Internet® Explorer is a registered trademark of Microsoft Corporation.

4 ActiveX® is a registered trademark of Microsoft Corporation.

5 Adobe®, Acrobat®, and Reader® are registered trademarks of Adobe.

6 ICA® is a registered trademark of Citrix Systems Inc.

Example Configuration[1]

Hardware:	CPU: 500 MHz or higher Memory: 256MB Physical Display Resolution: 1024 x 768, 16K colors Pointing Device with left and right click capability
Operating Systems:	Windows®[2] 98 Windows® NT 4.0 Windows® 2000
Connection:	56KB modem ISDN Direct Connect (T1, Fractional T1, etc.) DSL Cable-Modem
Browser:	Netscape® Communicator/Navigator Microsoft® Internet Explorer
Plug-ins:	JAVA® ActiveX® (Plug-in for Netscape®) Adobe Acrobat Reader® ICA®

Memory - Users who want to have multiple applications or EBBs open simultaneously should consider more memory.

CPU Speed - Users should be aware that higher CPU speeds may result in better performance.

1 Specific products should be reviewed prior to implementation for Year 2000 compliance. Examples provided represent a non-comprehensive set of configurations that a client may use. This example list in no way should be construed as an endorsement by NAESB WGQ of any specific products. Other products meeting the minimum technical characteristics of the client workstation may be used.

2 Windows® is a registered trademark of Microsoft Corporation.

APPENDIX C - Minimum and Suggested Technical Characteristics and Guidelines for the Developer and User of the Informational Postings Web Site

User technical characteristics provide specifications to the developer on the user environment for which the application will be designed and tested. Likewise, they will serve as guidelines to the user when purchasing the appropriate hardware and software to enable him/her to use the application.

Informational Postings Web Site User Technical Characteristics

	Minimum	Suggested
Connection Device:	33.3Kbs	Direct Connect
Operating System:	Multi-threaded & Preemptive	
RAM:	128 MB	>128 MB
Browser Capabilities:	Cookies & JavaScript Frames & Nested Frames Tables & Nested Tables HTML 3.2 Adobe Acrobat Reader®	
Display Resolution:	1024x768, 16k colors	>1024x768, 16k colors

Definitions:

Minimum user technical characteristics -

The environment and components for which the Web site application is designed and tested. This should include:
- a client environment comprised only of characteristics listed above, and,
- support for all mandated functions in accessing Informational Postings.

Suggested user technical characteristics -

Environment or components not required to perform all mandated functions in accessing Informational Postings, but could provide an enhanced user experience.

Examples of User Workstations Meeting Criteria of Informational Postings Web Site User Characteristics[1]

	Minimum	Suggested
Hardware:	Pentium®[2] 200MHz or equivalent	Pentium® 500MHz or greater
RAM:	128 MB	> 128 MB
Communication Device:	33.3 Kbs	Direct Connect ISDN Satellite 56 KB modem DSL Cable-Modem
Monitor:	12" Laptop 15" Desktop	> 12" Laptop > 15" Desktop
Display Capabilities:	1024x768 16k colors	> 1024x768 > 16k colors
Operating System:	Windows® 95 System 8®[3] Solaris®[4] 2.6	Windows® XP Windows® 98 Windows® NT 4.0 Solaris® 8 System 9® Windows® 2000 Windows® ME Linux
Browser:	Microsoft Internet Explorer®	Microsoft Internet Explorer®

1 Technical implementations above represent a non-comprehensive set of choices which an implementer may use. This list in no way should be construed as an endorsement by NAESB WGQ of any specific products. Other products supporting technical implementation may be used.

2 Pentium® is a registered trademark of Intel Corporation.

3 System 8® and System 9® are registered trademarks of Apple Computers, Inc.

4 Solaris® is a registered trademark of Sun Microsystems, Inc.

Netscape® Communicator	Netscape® Communicator

Informational Postings Web Site Developer Technical Characteristics

User's environment supporting the above minimum characteristics should be able to access all NAESB WGQ standardized features of Informational Postings Web Sites.

Any other Web technologies may be considered for use by the developer as long as they can be used by the client without requiring special actions including firewall rule changes that are not specified in Appendix D, use of a specific browser, logons and downloads of special helper applications such as plug-ins, viewers or readers except as specifically identified in this Appendix.

APPENDIX D - Minimum Technical Characteristics For EDM Communications

The following ports may be used by EDM developers and should be made available in user environments.

Allowable TCP Ports (not UDP ports)
- HTTP HTTPS 80, 443, 5713, 6112, 6304, 6874, 7403
- ICA® 1494
- RMI(Java®) 1099-1100
- Java® Telnet 31415
- TCP Optional 8001-8020**
- SMTP 25

Allowable UDP Ports (not TCP ports)
- Secure ICA® 1604

There are other technologies available that would require additional ports to be opened, such as FTP and Telnet. If and when NAESB WGQ approves such technologies, this list will be modified accordingly. The client-side firewall implementation and client browser settings should permit the downloading and installation of NAESB WGQ approved plug-ins and modules. Please refer to the NAESB WGQ defined Minimum Technical Characteristics for Accessing Customer Activities Web Sites for the listing of NAESB WGQ approved plug-ins and modules.

**The reservation of 20 optional ports was to provide room for implementations such as DCE, IIOP, and load balancing implementations. TSPs should endeavor to minimize the usage of these ports.

ICA® is a registered trademark of Citrix Systems Inc.

JAVA® is a registered trademark of Sun Microsystems, Inc.

Wholesale Gas Quadrant

TAB 21

2004 Annual Plan

North American Energy Standards Board
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NORTH AMERICAN ENERGY STANDARDS BOARD

2004 WGQ Annual Plan Revised by the Executive Committee – May 6, 2004

	Item Description	Completion[1]	Assignment
Gas-Electric Scheduling Activities			
1	Status Report on Gas-Electric scheduling coordination issues. Status: Complete	3rd Qtr 2004	Gas-Electric Coordination TF
Standards Implementation			
2	Review and develop necessary standards for FERC Order 2004 (Affiliate Order). Status: Complete	2nd Qtr 2004	Business Practices Subcommittee
Electronic Delivery Mechanisms and Related Activities			
3	Preparation of documents and submission of EDM standards to ANSI for approval as ANSI standards.	4th Qtr 2004	EDM Subcommittee
4	Explore additional possibilities for partnership with the Department of Energy. Sandia Review of security and reliability of NAESB EDM Standards. Status: Pending, Discussion Underway	4th Qtr 2004	EC Officers
5	Review and enhance security standards as required by technological changes. Review security standards as may be deemed necessary, e.g. Public Key Infrastructure (PKI). Status:	4th Qtr 2004	EDM Subcommittee WEQ Coordination
6	Review of minimum technical characteristics in Appendices C, D, and E of the EDM Manual. Status: Complete	3rd Qtr 2004	EDM Subcommittee
7	Prepare a common NAESB Electronic Transport (ET) and WGQ Quadrant Electronic Delivery Mechanism (WGQ QEDM) manuals using the version 1.6 NAESB WGQ EDM tab 6 and applicable 4.x.x standards as a base. Status: Pending, Discussion Underway	4th Qtr 2004	EDM Subcommittee

[1] Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed so as to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

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Gas Quality Activities

8	Establish web-based reports for tracking all physical and chemical properties of natural gas defined in pipeline tariffs (R03035, Item A)	3rd Qtr. 2004	Business Practices Subcommittee
	Status: Complete		

Contracts Activities

9	Review and develop ISDA Gas Annex.	4th Qtr. 2004	Contracts Subcommittee

Provisional Activities[2]

Subsequent FERC orders – Docket No. RM 96-1 (Creditworthiness)

Program of Standards Maintenance & Fully Staffed Standards Work[3]

Business Practice Requests	Ongoing	Assigned by the EC on a request by request basis
Continue review against plan for migration to ANSI ASC X12 new versions as needed and coordinate such activities with DISA.	Ongoing	ANSI (X12) Subcommittee
Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC on a request by request basis
Ongoing Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC on a request by request basis
Ongoing Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC on a request by request basis

Notes: (a) Priority is given to action items that are carry-overs from the 2003 Annual Plan.

[2] To the extent that it is determined that any of the provisional activities should be worked upon during the year as a result of a specific request for standards development or a FERC action, the Board has the discretion to modify the annual plan. Additionally, provisional activities will remain on the Annual Plan for one year pending the filing of a formal request or a decision to add them to the plan as active items.

[3] This work is considered routine maintenance and thus the items are not separately numbered.

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(b) Any new activity should be preceded by a request from the submitter after which the annual plan will be revisited. The provisional items would only be addressed after a request is submitted or an order is issued by the FERC.

Wholesale Gas Quadrant

TAB 22

2005 Annual Plan

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NORTH AMERICAN ENERGY STANDARDS BOARD

2005 DRAFT WGQ Annual Plan

Approved by the Executive Committee – DATE

	Item Description	Completion[1]	Assignment
Gas-Electric Activities			
1	Development of standards regarding an Energy Day (R04016) Status:	4th Qtr. 2005	BPS (joint with WEQ BPS)
2	Development of standards regarding daily operational communications between natural gas pipelines and gas fired electrical generators (R04021) Status:	4th Qtr. 2005	BPS (joint with WEQ BPS)
Electronic Delivery Mechanisms and Related Activities			
3	Prepare a common NAESB Electronic Transport (ET) and WGQ Quadrant Electronic Delivery Mechanism (WGQ QEDM) manuals using the version 1.6 NAESB WGQ EDM tab 6 and applicable 4.x.x standards as a base. Status: Pending, Discussion Underway	1st Qtr. 2005	EDM Subcommittee
4	Review of minimum technical characteristics in Appendices C, D, and E of the EDM Manual. Status:	2nd Qtr. 2005	EDM Subcommittee
5	Review and enhance security standards as required by technological changes. Review security standards as may be deemed necessary, e.g. Public Key Infrastructure (PKI). Status: Pending WEQ ITS/ESS outcome	3rd Qtr. 2005	EDM Subcommittee
6	Explore additional possibilities for partnership with the Department of Energy. Sandia Review of security and reliability of NAESB EDM Standards.	3rd Qtr. 2005	EC Officers

[1] Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed so as to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

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	Item Description	Completion[1]	Assignment
	Status: Pending, Discussion Underway		
7	Preparation of documents and submission of EDM standards to ANSI for approval as ANSI standards.	4th Qtr. 2005	EDM Subcommittee
	Status: Pending completion of item 6		

Contracts Activities

8	Review and develop a Canadian Supplement to the ISDA Gas Annex. (R#_____)	1st Qtr. 2005	Contracts Subcommittee
9	Review and develop modifications to the NAESB Base Contract for Sale and Purchase of Natural Gas	2nd Qtr.	Contracts Subcommittee

Provisional Activities[2]

Subsequent FERC orders – Docket No. RM 96-1 (Creditworthiness)

FERC rulemaking orders on Gas Quality

FERC rulemaking orders – Docket No. AD 04-10 (Storage Reporting)

Program of Standards Maintenance & Fully Staffed Standards Work[3]

	Business Practice Requests	Ongoing	Assigned by the EC on a request by request basis
	Continue review against plan for migration to ANSI ASC X12 new versions as needed and coordinate such activities with DISA.	Ongoing	ANSI (X12) Subcommittee

[2] To the extent that it is determined that any of the provisional activities should be worked upon during the year as a result of a specific request for standards development or a FERC action, the Board has the discretion to modify the annual plan. Additionally, provisional activities will remain on the Annual Plan for one year pending the filing of a formal request or a decision to add them to the plan as active items.

[3] This work is considered routine maintenance and thus the items are not separately numbered.

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Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC on a request by request basis
Ongoing Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC on a request by request basis
Ongoing Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC on a request by request basis

Notes: (a) Priority is given to action items that are carry-overs from the 2004 Annual Plan.

(b) Any new activity should be preceded by a request from the submitter after which the annual plan will be revisited. The provisional items would only be addressed after a request is submitted or an order is issued by the FERC.