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TO: Retail Markets Quadrant (RMQ) Information Requirements and Technical Electronic Implementation Subcommittee (IR/TEIS) Participants, WGQ Electronic Delivery Mechanisms Subcommittee (WGQ EDM), and Interested Industry Participants

FROM: Amrit Nagi, Staff Attorney

RE: Joint WGQ EDM Subcommittee and RMQ IR/TEIS Final Meeting Minutes – July 15, 2025

DATE: July 21, 2025

**Joint WGQ EDM and RMQ IR/TEIS Meeting**

**WHOLESALE GAS QUADRANT**

**Tuesday, July 15, 2025 from 1:00 to 3:00 PM Central**

**Final MINUTES**

**1. Welcome**

Mr. Burden welcomed the participants. Ms. Nagi reviewed the Antitrust and Other Meeting Policies reminder. Mr. Burden reviewed the draft agenda with the participants. Mr. Spangler moved, seconded by Ms. McKeever, to adopt the draft agenda as final. The motion passed a simple majority vote without opposition.

The participants reviewed the draft minutes from the August 22, 2024 meeting. Mr. McCord proposed a modification to correct a typographical mistake. Mr. Spangler moved, seconded by Mr. McCord, to adopt the revised draft minutes as final. The motion passed a simple majority vote without opposition. The final minutes for the meeting are available through the following hyperlink: <https://naesb.org/pdf4/wgq_edm_rmq_irteis082224fm.docx>

Mr. Burden reviewed the July 6, 2024 Joint WGQ Contracts, WGQ EDM, and WGQ BPS, and the September 4, 2024 Joint WGQ EDM and WGQ IR/Technical Subcommittees meeting draft minutes with the participants. No changes were offered. Mr. Spangler moved, seconded by Mr. Mr. McCord to adopt the draft minutes for both meetings. The motion passed a simple majority vote without opposition. Mr. Burden noted that the approved draft minutes for the July 6, 2025 meeting will be posted as final following review and approval by the WGQ Contracts Subcommittee and the WGQ BPS. Additionally, the approved draft minutes for the September 4, 2024 meeting will be posted as final following review and approval of the WGQ IR/Technical Subcommittees.

**2. Discussion and Possible Vote on 2025 WGQ Annual Plan Item 1 – Review WGQ Cybersecurity Related Standards Manual, including data fields and minimum technical characteristics, and revise as needed**

Mr. Burden reviewed the [WGQ Cybersecurity Standards Review Considerations Workpaper](https://naesb.org/member_login_check.asp?doc=wgq_edm_rmq_ir_teis071525w1.docx) to initiate discussion and a possible vote on the 2025 WGQ Annual Plan Item 1. He noted that the scope also included the WGQ Quadrant Electronic Delivery Mechanism (QEDM) Related Standards Manual, which functions in tandem with the WGQ Cybersecurity Related Standards Manual.

Mr. Spangler noted a prior effort to remove URLs from the standards document to prevent dead links. He emphasized the need to avoid “ping-ponging” where URLs are repeatedly added and removed without clear resolution. Mr. Burden agreed and noted that while he was comfortable with including or excluding URLs, the key was to be careful about referencing Request for Comments (RFCs) and ensuring they are current. Mr. Spangler supported keeping URLs for easy verification but cautioned against frequent, inconsistent changes. Mr. Burden invited further thoughts, acknowledging that maintaining URLs could be hard work, but it facilitates updates by enabling direct access to references. Mr. McCord agreed that both approaches could work, noting that excluding URLs would necessitate manual verification of all RFC refences. Mr. Spangler added that this was the intended practice regardless, supporting the inclusion of URLs as a mechanism to enforce ongoing validation. With no objections raised, Mr. Burden proposed retaining URLs and performing regular double-checks for accuracy and obsolescence.

The group then proceeded to review the document page by page. Mr. Spangler noted an incorrect appendix reference, which Mr. Burden confirmed by updating the reference from Appendix A to Appendix B.

Mr. Burden noted that some questions that commonly arise during the annual review, including one key size and versions of OpenPGP, were confirmed to be covered elsewhere in the standards. He expressed uncertainty regarding the HTML standards, noting no security threats had emerged from his threat analysis but invited the group to review the topic as homework. He offered to consult technical experts to ensure no implementation issues arise, highlighting the importance of balancing security with industry stability.

Mr. Burden shared results from an AI-assisted review, conducted behind a firewall, contained in the [Chair’s Workpaper on the WGQ QEDM Cybersecurity Manual](https://naesb.org/pdf4/wgq_edm_rmq_ir_teis071525w4.docx). The review indicated that certain PGP versions remain acceptable for current cybersecurity applications, though he noted there may be a future need to specify versions explicitly due to security concerns. The group discussed minimum technical characteristics for computing devices, noting that technological requirements had stabilized with fewer changes compared to previous years. Mr. Burden indicated most requests for higher specification typically came from pipelines requiring more robust platforms. Mr. Burden noted that during the AI analysis, the results highlighted that recommendations were positive with nothing alarming. He stated that the results removed problematic add-ins like Adobe Flash and noted Independent Computing Architecture (ICA) usage was diminishing. Mr. Kraft confirmed that ONEOK still used Citrix, which Mr. Spangler recalled was a print driver interface.

Moving on to Appendix C, Mr. Burden, noted a timing issue where the timestamp for the first attempt and the third attempt was the same. Mr. Spangler agreed that it was incorrect. Ms. Van Pelt asked about the millisecond accuracy. Mr. Burden acknowledged the point and added that while he did not believe there was a standard requiring that level of timing precision, they still needed to correct the example. The group agreed to change the time value in the third attempt to 01:59:99 to avoid duplication. Mr. Spangler noted that this fixed the issue. Ms. Van Pelt suggested clarifying that this was not intended to be a real-world implementation expectation. Mr. Burden emphasized that the changes were simply to resolve the error in the example.

Mr. Burden summarized that their homework would be to double-check all URLs and review the HTML version before the next meeting to finalize the document.

Mr. Spangler provided an overview of his [workpaper](https://naesb.org/pdf4/wgq_edm_rmq_ir_teis071525w5.docx). He observed a gap in organizational linkage between the QEDM and the WGQ Cybersecurity Manual. He proposed cross-referencing the two documents in the Executive Summary to alert users that both manuals are complementary and needed for secure transactions. The group discussed proposed language and placement of the new sections.

WGQ Cybersecurity Executive Summary as revised 7.15: <https://naesb.org/member_login_check.asp?doc=wgq_edm_rmq_irteis071525a3.docx>

WGQ QEDM Executive Summary as revised 7.15: <https://naesb.org/member_login_check.asp?doc=wgq_edm_rmq_irteis071525a4.docx>

Mr. Spangler encouraged everyone to review the language and think about the best way to present the information before the next meeting, allowing for collaboration and refinement.

Mr. Burden then provided an overview on the [Chair’s Summary of WGQ QEDM Manual Workpaper](https://naesb.org/pdf4/wgq_edm_rmq_ir_teis071525w3.docx). He explained that this document was also AI-assisted, behind a firewall. Mr. Burden stated that the document provided insights on browsers and port usage, and noted his surprise to see Google Chrome far ahead of other browsers like Microsoft Edge and Safari. Mr. McCord stated this may be unsurprising given mobile browser dominance. Mr. Burden noted that many ports needed to be open to conduct business, but found that enterprise security systems generally manage these risks effectively. Mr. Spangler asked whether ports like 6112, typically used for gaming, were still in use within their industry, prompting discussion on whether to poll NAESB members. Ms. Van Pelt noted that this would be complicated and time-consuming but possibly worthwhile.

Mr. Burden reviewed PGP encryption viability, confirming it remained sufficient for NAESB EDM, especially with user management. He also addressed authentication, noting multi-factor authentication (MFA) improved security since its adoption.

Mr. Burden noted the workpaper discussed potential cybersecurity vulnerabilities but found no alarming issues. It confirmed that TLS 1.2 was no longer allowed, upgrading to TLS 1.3. The group acknowledged most cybersecurity standards were now housed in the cybersecurity manual rather than the QEDM, which left the QEDM clearer, but emphasized the need for cross-referencing.

Mr. Van Pelt asked about the use of AI tools with copyrighted standards. Mr. Burden assured the participants that the AI review was done in a secured, behind-the-firewall environment with no data leaving Enbridge’s systems control. The AI was used as an assistant rather than a public resource, maintaining confidentiality.

Mr. Burden revisited the HTML standard references, noting the existing mention of HTML 4.01 was informational and not mandatory. He encouraged the group to check if HTML 5 adoption posed any compatibility or security issues, suggesting they investigate and bring back findings to avoid causing widespread implementation problems unnecessarily.

**3. Discussion and Possible Vote on 2025 RMQ Annual Plan Item 1 – Review RMQ Cybersecurity Model Business Practices including data fields and minimum technical characteristics, and revise as needed**

Mr. Burden introduced this agenda item and asked Ms. McKeever for her direction on how the WGQ Cybersecurity updates may be incorporated into the RMQ Cybersecurity Model Business Practices manual. She stated her preference to work offline with Ms. Nagi on the details as opposed to going through it during the meeting.

**4. Action Items and Other Business**

Mr. Burden reviewed the assignment for the group to double-check all URLs, review the HTML version before the next meeting, and review language for the QEDM and WGQ Cybersecurity related manuals’ Executive Summaries to finalize the documents.

**5. Adjourn**

The subcommittees adjourned at 2:15 PM Central on a motion made by Mr. Spangler.

**6. Attendees**

| **Name** | **Organization** |
| --- | --- |
| Christopher Burden | Enbridge (U.S.), Inc.  |
| April Gregory | Northern Natural Gas Company |
| Tom Kraft | ONEOK |
| Steven McCord | TC Energy Corporation |
| Debbie McKeever | Oncor  |
| Amrit Nagi | NAESB |
| Chris Perry | Northern Natural Gas Company |
| Leigh Spangler | ESG |
| Karen Stampfli | TVA |
| Kim Van Pelt | Kinder Morgan |