AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Energy Regulatory Commission is proposing to amend its regulations to incorporate by reference, with certain enumerated exceptions, the latest version (Version 3.2) of business practice standards adopted by the Wholesale Gas Quadrant of the North American Energy Standards Board (NAESB) applicable to natural gas pipelines in place of the currently incorporated version (Version 3.1) of those business practice standards. The revisions made by NAESB in this version of the standards are designed to enhance the natural gas industries’ system and software security measures and to clarify the processing of certain business transactions.

DATES: Comments are due [INSERT DATE 45 days after date of publication in the FEDERAL REGISTER]

ADDRESSES: Comments, identified by the docket number of this proceeding, may be filed electronically at https://www.ferc.gov/ in acceptable native applications and print-to-PDF, but not in scanned or picture format. For those unable to file electronically,
comments may be filed by mail or may be hand delivered. Mailed comments should be addressed to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, N.E., Washington, DC 20426. Hand-delivered comments should be delivered to: Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The Comment Procedures Section of this document contains more detailed filing procedures. The Comment Procedures Section of this document contains more detailed filing procedures.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION
The Federal Energy Regulatory Commission (Commission) proposes to amend its regulations at 18 CFR 284.12 to incorporate by reference, with certain enumerated
2. exceptions,¹ the latest version (Version 3.2) of business practice standards adopted by NAESB’s WGQ applicable to natural gas pipelines that NAESB reported to the Commission on August 17, 2020 in place of the currently incorporated version (Version 3.1) of those business practice standards. The implementation of these standards and regulations will promote the additional efficiency and reliability of the natural gas industries’ operations thereby helping the Commission to carry out its responsibilities under the Natural Gas Act (NGA). In addition, the proposed revisions are necessary to enhance the natural gas industries’ computer security requirements.²

I. **Background**

3. Since 1996, the Commission has adopted regulations to standardize the business practices and communication methodologies of interstate natural gas pipelines to create a more integrated and efficient pipeline grid. These regulations have been promulgated in the Order No. 587 series of orders,³ wherein the Commission has incorporated by reference standards for interstate natural gas pipeline business practices and electronic

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¹ As explained below, we are not proposing in this proposed rule to incorporate by reference the optional model contracts and the eTariff-related standards included in the North American Energy Standards Board (NAESB) Wholesale Gas Quadrant (WGQ) Version 3.2 package of business practice standards.

² As explained below, NAESB has developed and adopted, in conjunction with Sandia National Laboratories, a series of business practice standards to protect the natural gas industries’ internet security.

communications that were developed and adopted by NAESB’s WGQ. Upon incorporation by reference, this version of the standards will replace the currently incorporated version (Version 3.1) of those business practice standards.

4. On August 17, 2020, NAESB filed a report informing the Commission that it had adopted and ratified WGQ Version 3.2 of its business practice standards applicable to interstate natural gas pipelines. Version 3.2 of the WGQ includes business practice standards developed and modified in response to industry requests and directives from the NAESB Board of Directors. This version also includes the standards developed in response to the recommendations of Sandia National Laboratory (Sandia),\(^4\) which in 2019 issued a cybersecurity surety assessment of the NAESB standards sponsored by DOE (Sandia Surety Assessment),\(^5\) and the standards developed to enable the use of distributed

\(^4\) Sandia is a multidisciplinary national laboratory and federally funded research and development center for the U.S. Department of Energy’s (DOE) National Nuclear Security Administration that supports numerous federal, state, and local government agencies, companies, and organizations.

\(^5\) In April 2017, NAESB announced that Sandia, through funding provided by DOE, would be performing a surety assessment of the NAESB standards. As determined by Sandia and DOE, the purpose of the surety assessment was to analyze cybersecurity elements within the standards, focusing on four areas: (1) the NAESB Certification Program for Accredited Certification Authorities, including the Wholesale Electric Quadrant (WEQ)-012 Public Key Infrastructure Business Practice Standards, the NAESB Accreditation Requirements for Authorized Certificate Authorities, and the Authorized Certification Authority Process; (2) the WEQ Open Access Same-Time Information Systems suite of standards; (3) the WGQ and Retail Markets Quadrant Internet Electronic Transport (IET) and Quadrant Electronic Delivery Mechanism (EDM) Related Standards Manual; and (4) a high-level dependency analysis between the gas and electric markets to evaluate the different security paradigms the markets employ.
ledger technologies when transacting the NAESB Base Contract for Sale and Purchase of Natural Gas.

5. The NAESB report identifies all the changes made to the WGQ Version 3.1 Standards and summarizes the deliberations that led to the changes being made. It also identifies changes to the existing standards that were considered but not adopted due to a lack of consensus or other reasons.

II. Discussion

6. In this NOPR, we propose to incorporate by reference, in our regulations, Version 3.2 of the NAESB WGQ consensus business practice standards, with certain exceptions.\(^6\) We propose that compliance filings made in accordance with a final rule be made 120 days after issuance of a final rule in this proceeding or on the first business day thereafter if falling on a weekend or holiday, with an effective date 180 days from the date compliance filings are due in this proceeding or the first business day thereafter if falling on a weekend or holiday. This will allow time for the Commission to process the compliance filings before the effective date of the new standards.

7. As the Commission found in Order No. 587, adoption of consensus standards is appropriate, because the consensus process helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Moreover, because the industry

\(^6\) In the discussion below we identify the NAESB WGQ Version 3.2 Standards that we propose not to incorporate by reference.
conducts business under these standards, the Commission's regulations should reflect those standards that have the widest possible support. In section 12(d) of the National Technology Transfer and Advancement Act of 1995, Congress affirmatively requires federal agencies to use technical standards developed by voluntary consensus standards organizations, like NAESB, to carry out policy objectives or activities.

8. We discuss below some specific aspects of NAESB’s report.

A. Modifications to Previous Version of Standards

1. Modifications in Response to the Sandia Surety Assessment

9. NAESB revised previously incorporated standards and developed new standards in response to the recommendations in the Sandia Surety Assessment. Specifically, NAESB adopted revisions to the WGQ EDM Related Business Practice Standards, which establish the framework for the electronic dissemination and communication of information between parties in the North American wholesale gas marketplace, and to the WGQ IET Related Business Practice Standards, which define the implementation of various technologies necessary to communicate transactions and other electronic data using standard protocols for electronic commerce over the internet between trading partners. First, NAESB adopted two new standards, 4.3.109 and 10.3.28, to provide that trading partners should evaluate software fixes or patches for known vulnerabilities within 30 days and implement the fix or patch as soon as reasonably practicable based on the severity of the risk. Second, NAESB adopted two new standards, 4.3.110 and 10.3.29, to provide that trading partners should mutually agree to the version of the EDM and IET to be used. Third, the new standards specify notification and coordination
timelines with trading partners, where applicable, to address vulnerable systems or software as soon as possible. Fourth, the Sandia Surety Assessment recommended that NAESB consider guidelines for configuration and logging, network traffic monitoring, alerting systems, and manual continuity of operations in the event of abnormal behavior or failure conditions within the system. In response, NAESB added language to new Standards 4.3.110 and 10.3.28 to include both specific and broad adoptions of such system security measures.

10. Further, NAESB added language to existing Standards 4.3.60, 4.3.61, 10.2.33, and 10.3.25 to clarify the Transport Layer Security protocol,\textsuperscript{7} which encrypts data to hide information from electronic observers on the internet. NAESB also deleted all references to the Secure Sockets Layer protocol in the standards.

11. Concerning identification key lengths, the Sandia Surety Assessment recommended that Rivest-Shamir-Adelman keys\textsuperscript{8} must be no shorter than 2048 bits,

\footnotesize
\textsuperscript{7} The National Institute of Standards and Technology Special Pub. 800-52 requires government Transport Layer Security servers and clients to support Transport Layer Security Version 1.2 and recommends support for Transport Layer Security Version 1.3 by the year 2024.

\textsuperscript{8} Rivest-Shamir-Adelman is a public key infrastructure algorithm composed of a public component and a private component that is typically installed on a recognized Certificate Authority.
Elliptic Curve Digital Signature Algorithm keys⁹ must be no shorter than 224 bits, Hash¹⁰ algorithms should be from the Secure Hash Algorithm (SHA)-2¹¹ or SHA-3 families, and acceptable Advanced Encryption Standard key lengths range from 128, to 192, to 256. The Sandia Surety Assessment recommended that, in general, implementors use the largest feasible key length consistent with implementation of current business processes. In response, NAESB deleted Standard 4.3.83 to remove legacy support references and maintain a minimum encryption strength of 128 bits. Further, NAESB revised existing Standards 10.2.34 and 10.3.15 to delete a proprietary Pretty Good Privacy (PGP)¹²-related hyperlink and to accommodate license-free OpenPGP,¹³ respectively. NAESB also adopted a new Standard 10.2.39 to specify that OpenPGP should be used to create public and private keys for privacy and digital signature applications.

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⁹ Elliptic Curve Digital Signature Algorithm public keys generate an encrypted signature to validate data.

¹⁰ A Hash is cryptology technique used for digital signatures in which a series of numbers that may represent, for example, a password, an image, a document, or an executable file is used to generate a cryptographic hash (i.e., a large number).

¹¹ SHA-2 is a set of cryptographic hash functions.

¹² PGP is a proprietary (i.e., an organization must pay to use it) encryption program developed to enhance the confidentiality and integrity of data.

¹³ OpenPGP is an encryption standard defined by the Internet Engineering Task Force enabling design and implementation free of licensing fees. At present, the encryption method is generally considered the most secure.
12. Further, NAESB revised existing Standards 4.3.60, 4.3.84, 10.3.4, and 10.3.16 to specify Hyper-Text Transport Protocol Secure (HTTPS), which is an encrypted version of Hyper-Text Transport Protocol (HTTP), whenever a secure communication is required to protect information in transit and support overall privacy needs. Moreover, NAESB revised existing Standards 4.3.60 and 10.3.16 to require multi-factor (e.g., two-factor) authentication on an individual basis and state that secure web sites should employ individual user credentials.

2. **Modifications in Response to Industry Request**

13. The following section describes standards development efforts undertaken by NAESB in response to industry requests or through the normal course of WGQ activities that resulted in modifications to the Nomination Related Standards, QEDM Standards, and an effort that impacted multiple sets of standards. NAESB made corresponding revisions, where appropriate, to the related data sets and technical implementation as part of the standards development effort.

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14 HTTPS authentication encrypts username and password combinations as part of a Uniform Resource Locator address. To obtain an HTTPS connection, a web browser must contact a trusted, commercial Certificate Authority, such as a NAESB Authorized Certificate Authority, to obtain the web server’s public key, and follow other applicable HTTPS procedures.

15 HTTP is the original communications protocol of the Internet which enables a web browser to depict text, pictures, shapes, live data, and click targets on a web browser. However, username and password combinations are not encrypted in HTTP basic authentication.
a. **Nomination Related Standards**

14. NAESB revised existing Standards 1.3.27, 1.4.1, and 1.4.2 to add a new data element “Capacity Block ID” to allow a Service Requester to determine which primary point rights of the contract their segmented nomination\(^\text{16}\) is using and eliminate an existing manual business process from the TSP to automate the business process.

b. **Quadrant Electronic Delivery Mechanisms Related Standards**


c. **Revisions Impacting Multiple Standards**

16. NAESB revised multiple standards\(^\text{17}\) and data sets\(^\text{18}\) to remove references to the term “gigacalories” and add the term “gigajoules,” consistent with the standard quantity for nominations, confirmations, and scheduling in Mexico.

\(^\text{16}\) In order for a Service Requester to have control over its segmented nomination(s), the Transportation Service Provider (TSP) will require a “Capacity Block ID” to be submitted with each nomination line item specifying a Transaction Type of “Segmented.”

\(^\text{17}\) NAESB WGQ Version 3.2 Standards 1.3.14, 1.3.15, 1.3.82, and 3.3.3.

\(^\text{18}\) NAESB WGQ Version 3.2 Standards 0.4.1 through 0.4.3, 1.4.1, 1.4.3 through 1.4.6, 2.4.1, 2.4.6, 2.4.17, 3.4.1, 3.4.2, 5.4.24 through 5.4.26.
d. **Other Material in NAESB’s Report**

17. NAESB revised multiple data sets which impacted technical implementation documentation only.

18. Further, NAESB revised its optional model contracts and corresponding Mexican and Canadian Addendums to reflect a standard digital representation of natural gas trade events. NAESB states that these revisions are intended to capitalize on smart contracts and distributed ledger technologies.

**B. Standards Proposed Not to be Incorporated by Reference**

19. We propose to continue our past practice\(^\text{19}\) of not incorporating by reference into our regulations any optional model contracts because we do not require the use of these contracts and therefore we do not need to include them in our regulations.\(^\text{20}\) In addition, consistent with our findings in past proceedings, we are not proposing to incorporate by reference the Wholesale Electric Quadrant/WGQ eTariff Related Standards because the Commission adopted and posted its standards and protocols for electronic tariff filings\(^\text{21}\)

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C. **Proposed Implementation Procedures**

20. We propose to continue the compliance filing requirements as revised in Order No. 587-V. We propose that compliance filings made in accordance with a final rule be made 120 days after issuance of a final rule in this proceeding or on the first business day thereafter if falling on a weekend or holiday, with an effective date 180 days from the date compliance filings are due in this proceeding or the first business day thereafter if falling on a weekend or holiday. As the Commission found in Order No. 587-V, adoption of the revised compliance filing requirements increases the transparency of the interstate natural gas pipelines’ incorporation by reference of the NAESB WGQ Standards so that shippers and the Commission will know which tariff provision(s) implements each standard as well as the status of each standard.

21. Consistent with our practice since Order No. 587-V, each pipeline must designate a single tariff section under which every NAESB WGQ Standard incorporated by reference by the Commission is listed. For each standard, the pipeline must specify in the tariff section or tariff sheet(s) listing all the NAESB standards:

(a) whether the standard is incorporated by reference;

(b) for those standards not incorporated by reference, the tariff provision that complies

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22 Order No. 587-V, 140 FERC ¶ 61,036 at PP 36-39.


24 *Id.* P 36; *WGQ Version 3.1 NOPR*, 164 FERC ¶ 61,125 at P 18.
with the standard; or

(c) for those standards with which the pipeline does not comply, an explanatory statement, including an indication of whether the pipeline has been granted a waiver, extension of time, or other variance with respect to compliance with the standard.\(^{25}\)

Likewise, consistent with past practice, we will post on our eLibrary web site (under Docket No. RM96-1-042) a sample tariff format, to provide filers an illustrative example to aid them in preparing their compliance filings.

22. Consistent with our policy since Order No. 587-V,\(^{26}\) we propose that requests for waivers that do not meet the requirements set forth in Order No. 587-V will not be granted. In particular, as we explained in Order No. 587-V, waivers are unnecessary and will not be granted when the standard applies only on condition the pipeline performs a business function and the pipeline currently does not perform that function.\(^{27}\)

23. If the pipeline is requesting a continuation of an existing waiver or extension of time, it must include a table in its transmittal letter that identifies the standard for which the Commission granted a waiver or extension of time, and the docket number or order citation to the proceeding in which the Commission granted the waiver or extension of

\(^{25}\) Shippers can use the Commission’s electronic tariff system to locate the tariff record containing the NAESB standards, which will indicate the docket in which any waiver or extension of time was granted.

\(^{26}\) Order No. 587-V, 140 FERC ¶ 61,036.

\(^{27}\) Order No. 587-V Compliance Order, 141 FERC ¶ 61,167 at PP 4, 38.
The pipeline also must present an explanation for why such waiver or extension of time should remain in force with regard to the WGQ Version 3.2 Standards.

24. This continues our practice of having pipelines include in their tariffs a common location that identifies the way in which the pipeline is incorporating all the NAESB WGQ Standards and the standards with which it is required to comply.

III. Notice of Use of Voluntary Consensus Standards

25. Office of Management and Budget Circular A-119 (section 11) (February 10, 1998) provides that Federal Agencies should publish a request for comment in a NOPR when the agency is seeking to issue or revise a regulation proposing to adopt a voluntary consensus standard or a government-unique standard. In this NOPR, we are proposing to incorporate by reference voluntary consensus standards developed by the WGQ.

IV. Incorporation by Reference

26. The Office of the Federal Register requires agencies proposing to incorporate material by reference to discuss the ways that the materials it incorporates by reference are reasonably available to interested parties and how interested parties can obtain the materials. The regulations also require agencies to summarize, in the preamble of the final rule, the material that it incorporates by reference. The standards we are proposing to incorporate by reference consist of seven suites of NAESB WGQ Business Practice Standards that address a variety of topics and are designed to streamline the transactional

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processes for the wholesale natural gas industry by promoting a more competitive and efficient market. These include the: WGQ Additional Business Practice Standards; WGQ Nominations Related Business Practice Standards; WGQ Flowing Gas Related Business Practice Standards; WGQ Invoicing Related Business Practice Standards; Quadrant Electronic Delivery Mechanism Related Business Practice Standards; Capacity Release Related Business Practice Standards; and Internet Electronic Transport Related Business Practice Standards. We summarize these standards below.

27. **The WGQ Additional Business Practice Standards** address six areas: Creditworthiness; Storage Information; Gas/Electric Operational Communications; Operational Capacity; Unsubscribed Capacity; and Location Data Download.

- The Creditworthiness related standards describe requirements for the exchange of information, notification, and communication between parties during the creditworthiness evaluation process.
- The Storage Information related standards define the information to be provided to natural gas service requesters related to storage activities and/or balances.
- The Gas/Electric Operational Communications related standards define communication protocols intended to improve coordination between the gas and electric industries in daily operational communications between transportation service providers and gas-fired power plants. The standards include requirements for communicating anticipated power generation fuel for the upcoming day as well as any operating problems that might hinder gas-fired power plants from receiving contractual gas quantities.
- The Operational Capacity related standards define requirements of the transportation service provider related to the reporting and requesting of a transportation service provider’s operational capacity, total scheduled quantity, and operationally available capacity.

- The Unsubscribed Capacity related standards define requirements of the transportation service provider related to the reporting and requesting of a transportation service provider’s available unsubscribed capacity.

- The Location Data Download related standards define requirements for the use of codes assigned by the transportation service provider for locations and common codes for parties communicating electronically.

28. **The WGQ Nominations Related Business Practice Standards** define the process by which a natural gas service requester with a natural gas transportation contract nominates (or requests) service from a pipeline or a transportation service provider for the delivery of natural gas.

29. **The WGQ Flowing Gas Related Business Practice Standards** define the business processes related to the communication of entitlement rights of flowing gas at a location, of the entitlement rights on a contractual basis, of the management of imbalances, and of the measurement and gas quality information of the actual flow of gas.

30. **The WGQ Invoicing Related Business Practice Standards** define the process for the communication of charges for services rendered (Invoice), communication of
details about funds rendered in payment for services rendered (Payment Remittance), and communication of the financial status of a customer’s account (Statement of Account).

31. **The Quadrant Electronic Delivery Mechanism Related Business Practice Standards** define the framework for the electronic dissemination and communication of information between parties in the North American wholesale gas marketplace for Electronic Data Interchange/EDM transfers, batch flat file/EDM transfers, informational postings web sites, Electronic Bulletin Boards/EDM, and interactive flat file/EDM.

32. **The Capacity Release Related Business Practice Standards** define the business processes for communication of information related to the selling of all or any portion of a transmission service requester’s contract rights.

33. **The Internet Electronic Transport Related Business Practice Standards** define the implementation of various technologies necessary to communicate transactions and other electronic data using standard protocols for electronic commerce over the internet between trading partners.

34. Our regulations provide that copies of the standards incorporated by reference may be obtained from NAESB at https://www.naesb.org/ or (713) 356-0060. Copies of the standards may be inspected at the Federal Energy Regulatory Commission, Public Reference Room, 888 First Street, NE, Washington, DC 20426, Phone: (202) 502–8371, https://www.ferc.gov/. However, at this time, the Commission has suspended access to the Commission's Public Reference Room due to the President’s March 13, 2020 proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID-19).
35. NAESB is a private consensus standards developer that develops voluntary wholesale and retail standards related to the energy industry. The procedures used by NAESB make its standards reasonably available to those affected by Commission regulations, which generally is comprised of entities that have the means to acquire the information they need to effectively participate in Commission proceedings. Participants can join NAESB, for an annual membership cost of $8,000, which entitles them to full participation in NAESB and enables them to obtain these standards at no additional cost. Non-members may obtain the Individual Standards Manual or Booklets for each of the seven Manuals by email for $250 per manual, which in the case of these standards would total $1,750. Non-members also may obtain the complete set of Standards Manuals, Booklets, and Contracts on USB flash drive for $2,000. NAESB also provides a free electronic read-only version of the standards for a three-business day period or, in the case of a regulatory comment period, through the end of the comment period. In addition, NAESB considers requests for waivers of the charges on a case-by-case basis depending on need.

V. Information Collection Statement

36. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting, record keeping, and public disclosure requirements (information collection) imposed by an agency.\(^\text{29}\) Therefore, we are submitting our proposed information collection to OMB for review in accordance with section 3507(d)

\(^{29}\) 5 CFR 1320.11 (2020).
of the Paperwork Reduction Act of 1995. Upon approval of a collection of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of a rule will not be penalized for failing to respond to these collections of information unless the collection of information displays a valid OMB control number.

37. We solicit comments on our need for this information, whether the information will have practical utility, the accuracy of the provided burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected, and any suggested methods for minimizing respondents’ burden, including the use of automated information techniques.

38. **Public Reporting Burden:** The Commission’s burden estimates for the proposals in this NOPR are for one-time implementation of the information collection requirements of this NOPR (including tariff filing, documentation of the process and procedures, and information technology work).

39. The collections of information related to this NOPR fall under FERC–545 (Gas Pipeline Rates: Rate Change (Non-Formal))\(^\text{30}\) and FERC–549C (Standards for Business Practices of Interstate Natural Gas Pipelines).\(^\text{31}\) The following estimates of reporting burden are related only to this NOPR and anticipate the costs to pipelines for compliance

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\(^\text{30}\) FERC-545 covers rate change filings made by natural gas pipelines, including tariff changes.

\(^\text{31}\) FERC-549C covers Standards for Business Practices of Interstate Natural Gas Pipelines.
with our proposals in this NOPR. The burden estimates are primarily related to implementing these standards and regulations and will not result in ongoing costs.

<table>
<thead>
<tr>
<th>RM96-1-042 NOPR (Standards for Business Practices of Interstate Natural Gas Pipelines)</th>
<th>Number of Respondents(^{32}) (1)</th>
<th>Annual Number of Responses per Respondent (2)</th>
<th>Total Number of Responses (1)*(2) = (3)</th>
<th>Average Burden Hr. Per Response (4)</th>
<th>Total Annual Burden Hours &amp; Total Annual Cost(^{33}) (3)*(4) = (5)</th>
<th>Annual Costs Per Respondent ($) (5) / (1) = (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FERC-545 (one-time)</td>
<td>178</td>
<td>1</td>
<td>178</td>
<td>10 hrs.; $1,010</td>
<td>1,780 hrs.; $179,780</td>
<td>$1,010</td>
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<tr>
<td>FERC-549C (one-time)</td>
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<td>1</td>
<td>178</td>
<td>100 hrs.; $10,100</td>
<td>17,800 hrs.; $1,797,800</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>356</td>
<td>19,580 hrs.; $1,977,580</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

\(^{32}\) The number of respondents is the number of entities in which a change in burden from the current standards to the proposed exists, not the total number of entities from the current or proposed standards that are applicable.

\(^{33}\) The estimated hourly cost (salary plus benefits) provided in this section is based on the salary figures for May 2019 posted by the Bureau of Labor Statistics for the Utilities sector (available at https://www.bls.gov/oes/current/naics3_221000.htm) and scaled to reflect benefits using the relative importance of employer costs for employee compensation from June 2020 (available at https://www.bls.gov/news.release/ecenr0.nr0.htm). The hourly estimates for salary plus benefits are:

- Computer and Information Systems Manager (Occupation Code: 11-3021), $101.58
- Computer and Information Analysts (Occupation Code: 15-1120(221)), $87.42
- Electrical Engineer (Occupation Code: 17-2071), $70.19
- Legal (Occupation Code: 23-0000), $142.65

The average hourly cost (salary plus benefits), weighting all of these skill sets evenly, is $100.50. We round it to $101/hour.
The one-time burden (for both the FERC-545 and FERC-549C) will take place in Year 1 and will be averaged over three years:

FERC-545: 1,780 hours ÷ 3 = 593 hours/year over three years
FERC-549C: 17,800 hours ÷ 3 = 5,933 hours/year over three years

The number of responses is also averaged over three years (for both the FERC-545 and FERC-549C):

FERC-545: 178 responses ÷ 3 = 59 responses/year
FERC-549C: 178 responses ÷ 3 = 59 responses/year

The responses and burden for Years 1-3 will total respectively as follows:

Year 1: 59 responses; 593 hours (FERC-545); 5,933 hours (FERC-549C)
Year 2: 59 responses; 593 hours (FERC-545); 5,933 hours (FERC-549C)
Year 3: 59 responses; 593 hours (FERC-545); 5,933 hours (FERC-549C)

**Title:** FERC-545, Gas Pipeline Rates: Rates Change (Non-Formal);
FERC-549C, Standards for Business Practices of Interstate Natural Gas Pipelines.

**Action:** Proposed information collections

**OMB Control Nos.:** 1902-0154 (FERC-545), 1902-0174 (FERC-549C).

**Respondents:** Business or other for profit (e.g., Natural Gas Pipelines, applicable to only a few small businesses).

**Frequency of Responses:** One-time implementation (related to business procedures, capital/start-up).

**Necessity of Information:** In response to the recommendations in the Sandia report, the proposals in this NOPR would, if implemented, upgrade current business practices and
communication standards by updating the Quadrant EDM Related Standards and IET Related Standards to specifically: (1) require the implementation of fixes or patches for known vulnerabilities as soon as reasonably practicable in coordination with other trading partners; (2) specify notification timelines to provide notice to trading partners of any systems or software that have not been updated and the potential impact of using the vulnerable system; (3) include both specific and broad adoptions of system security measures and specific notification and coordination during outages with affected trading partners; (4) maintain a minimum encryption strength of 128 bits, (5) specify that OpenPGP should be used to create public and private keys for privacy and digital signature applications; (6) specify HTTPS whenever secure communication is required to protect information in transit and support overall privacy needs; (7) use the largest feasible key length consistent with implementation of current business processes; (8) state that secure web sites should employ individual user credentials; and (9) encourage security assessments and coordination between customers, vendors, and trading partners.

Further, in response to industry requests or through the normal course of WGQ activities, the proposals in this NOPR would, if implemented, upgrade current business practices and communication standards by specifically: (1) updating the Nominations Related Standards to allow a Service Requester to determine which rights of the contract its segmentation nomination is using; (2) updating the Quadrant EDM Related Standards to (i) define a NAESB standard time frame for information to be retained on a pipeline’s Informational Postings web site, (ii) allow for processing functions at the line item level on Customer Activities web sites and allow for the use of icons and/or graphical control
elements for navigation and/or processing functions, and (iii) make minor revisions
designed to add clarity, update the minimum technical characteristics to account for
changes in technology since the previous version (Version 3.1) of the WGQ standards,
and update the minimum and suggested operating systems and web browsers that entities
should support; (3) updating multiple sets of standards to remove references to the term
“gigacalories” and add the term “gigajoules” as the standard quantity for nominations,
confirmations, and scheduling in Mexico; and (4) revising the NAESB WGQ data sets or
other technical implementation documentation while not resulting in modifications to the
underlying business practice standards. The package of standards also includes minor
corrections. The implementation of these data requirements will provide additional
transparency to Informational Postings web sites and will improve communication
standards. The implementation of these standards and regulations will promote the
additional efficiency and reliability of the natural gas industries’ operations thereby
helping the Commission to carry out its responsibilities under the NGA. In addition, the
Commission’s Office of Enforcement will use the data for general industry oversight.

Internal Review: We have reviewed the requirements pertaining to business practices of
interstate natural gas pipelines and made a preliminary determination that the proposed
revisions are necessary to establish a more efficient and integrated pipeline grid. These
requirements conform to our plan for efficient information collection, communication,
and management within the natural gas pipeline industries. We determined through our
internal review, that there is specific, objective support for the burden estimates
associated with the information requirements.
41. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC  20426 [Attention: Ellen Brown, Office of the Executive Director], e-mail: DataClearance@ferc.gov, telephone: (202) 502-8663, fax: (202) 273-0873.

42. Comments concerning the collection of information(s) and the associated burden estimate(s), should be sent to the contact listed above and to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission, telephone: (202) 395-0710; fax: (202) 395-4718].

VI. **Environmental Analysis**

43. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment. The actions that we propose to take here fall within categorical exclusions in the Commission’s regulations for rules that are clarifying, corrective, or procedural, for information gathering, analysis, and dissemination, and for rules regarding sales, exchange, and transportation of natural gas that require no construction of facilities. Therefore, an environmental review is unnecessary and has not been prepared as part of this NOPR.

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VII. **Regulatory Flexibility Act**

44. The Regulatory Flexibility Act of 1980 (RFA)\(^ {36} \) generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. The Commission is not required to make such analysis if proposed regulations would not have such an effect.

45. Approximately 178 interstate natural gas pipelines, both large and small, are potential respondents subject to the requirements adopted by this rule. Most of the natural gas pipelines regulated by the Commission do not fall within the RFA’s definition of a small entity,\(^ {37} \) which is currently defined for natural gas pipelines as a company that, in combination with its affiliates, has total annual receipts of $30 million or less.\(^ {38} \) For the year 2019, only 11 companies not affiliated with larger companies had annual revenues in combination with its affiliates of $30 million or less and therefore could be considered a small entity under the RFA. This represents about six percent of the total universe of potential respondents that may have a significant burden imposed on them. We estimate that the one-time implementation cost of the proposals in this NOPR is

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\(^ {36} \) 5 U.S.C. 601-612.

\(^ {37} \) See 5 U.S.C. 601(3) citing section 3 of the Small Business Act (SBA), 15 U.S.C. 623. Section 3 of the SBA defines a “small business concern” as a business which is independently owned and operated, and which is not dominant in its field of operation (2019).

\(^ {38} \) 13 C.F.R. § 121.201 (Subsector 486-Pipeline Transportation; North American Industry Classification System code 486210; Pipeline Transportation of Natural Gas) (2020). “Annual Receipts” are total income plus cost of goods sold.
$1,977,580 (or $11,110 per entity, regardless of entity size).\textsuperscript{39} We do not consider the estimated $11,110 impact per entity to be significant. Moreover, these requirements are designed to benefit all customers, including small businesses that must comply with them. Further, as noted above, adoption of consensus standards helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Because of that representation and the fact that industry conducts business under these standards, the Commission’s regulations should reflect those standards that have the widest possible support.

46. Accordingly, pursuant to section 605(b) of the RFA,\textsuperscript{40} the regulations proposed herein should not have a significant economic impact on a substantial number of small entities.

VIII. Comment Procedures

47. We invite interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due [INSERT DATE 45 days after date of publication in the FEDERAL REGISTER]]. Comments must

\textsuperscript{39} This number is derived by dividing the total cost figure by the number of respondents. $1,977,580/178 = $11,110.

\textsuperscript{40} 5 U.S.C. 605(b).
refer to Docket No. RM96-1-042, and must include the commenter's name, the organization they represent (if applicable), and their address in their comments.

48. We encourage comments to be filed electronically via the eFiling link on the Commission's web site at https://www.ferc.gov/. We accept most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

49. Commenters that are not able to file comments electronically may mail or hand-deliver an original of their comments. Mailed comments should be addressed to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426. Hand-delivered comments should be delivered to: Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

50. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

IX. Document Availability

51. In addition to publishing the full text of this document in the Federal Register, we provide all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (https://www.ferc.gov/). At this time, we have suspended access to the Commission's Public Reference Room due
to the President’s March 13, 2020 proclamation declaring a National Emergency
concerning the Novel Coronavirus Disease (COVID-19).

52. From the Commission's Home Page on the Internet, this information is available
on eLibrary. The full text of this document is available on eLibrary in PDF and
Microsoft Word format for viewing, printing, and/or downloading. To access this
document in eLibrary, type the docket number excluding the last three digits of this
document in the docket number field.

53. User assistance is available for eLibrary and our web site during normal business
hours from the Commission’s Online Support at (202) 502-6652 (toll free at 1-866-208-
3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202)
502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at
public.referenceroom@ferc.gov.

List of subjects in 18 CFR Part 284

By direction of the Commission.

Kimberly D. Bose,
Secretary.
In consideration of the foregoing, we propose to amend Part 284, Chapter I, Title 18, Code of Federal Regulations, as follows.

PART 284 -- CERTAIN SALES AND TRANSPORTATION OF NATURAL GAS UNDER THE NATURAL GAS POLICY ACT OF 1978 AND RELATED AUTHORITIES

1. The authority citation for part 284 continues to read as follows:


2. Sections 284.12(a)(1) and (a)(2) are revised to read as follows:

**Section 284.12 Standards for pipeline business operations and communications.**

   (a) *Incorporation by reference of NAESB standards.*

   (1) An interstate pipeline that transports gas under subparts B or G of this part must comply with the business practices and electronic communications standards as promulgated by the North American Energy Standards Board, as incorporated herein by reference in paragraphs (a)(1)(i) through (vii) of this section.

   (i) Additional Standards (Version 3.2, August 15, 2020);

   (ii) Nominations Related Standards (Version 3.2, August 15, 2020);

   (iii) Flowing Gas Related Standards (Version 3.2, August 15, 2020);

   (iv) Invoicing Related Standards (Version 3.2, August 15, 2020);

   (v) Quadrant Electronic Delivery Mechanism Related Standards (Version 3.2, August 15, 2020);

   (vi) Capacity Release Related Standards (Version 3.2, August 15, 2020); and


   (2) This incorporation by reference was approved by the Director of the Federal
Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these standards may be obtained from the North American Energy Standards Board, 801 Travis Street, Suite 1675, Houston, TX 77002, Phone: (713) 356-0060. NAESB's Web site is at https://www.naesb.org/. Copies may be inspected at the Federal Energy Regulatory Commission, Public Reference Room, 888 First Street, NE., Washington, DC 20426, Phone: (202) 502-8371, https://www.ferc.gov/, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.