

146 FERC ¶ 61,201  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 284

[Docket No. RM14-2-000]

Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public  
Utilities

(March 20, 2014)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Energy Regulatory Commission (Commission) is proposing, as part of a series of orders, to revise its regulations at section 284.12 to better coordinate the scheduling of natural gas and electricity markets in light of increased reliance on natural gas for electric generation, as well as to provide additional flexibility to all shippers on interstate natural gas pipelines. The proposed revisions in this Notice of Proposed Rulemaking deal principally with revision of the operating day and scheduling practices used by interstate pipelines to schedule natural gas transportation service. These proposed revisions affect the business practices of the natural gas industry, which the industry has developed through the North American Energy Standards Board, and which the Commission has incorporated by reference into its regulations. The Commission, therefore, is providing the natural gas and electric industries with six months to reach consensus on standards, consistent with the Commission's guidance, including any revisions or modifications to the proposals provided herein.

DATES: Comments are due [**INSERT DATE**: 240 days after publication in the *Federal Register*].

ADDRESSES: Comments, identified by docket number, may be filed in the following ways:

- Electronic Filing through <http://www.ferc.gov>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Those unable to file electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Comment Procedures Section of this document.

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SUPPLEMENTARY INFORMATION:

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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Natural Gas Pipelines and Public Utilities

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NOTICE OF PROPOSED RULEMAKING

TABLE OF CONTENTS

	<u>Paragraph Numbers</u>
I. Background.....	<u>12.</u>
A. Current Natural Gas and Electric Scheduling Systems.....	<u>13.</u>
1. Nationwide Scheduling for Natural Gas Interstate Pipeline Transportation.....	<u>13.</u>
2. Electric Scheduling.....	<u>19.</u>
3. Commission Conferences.....	<u>22.</u>
II. Discussion.....	<u>27.</u>
A. Overview.....	<u>27.</u>
B. Gas Day.....	<u>36.</u>
1. Background and Issues.....	<u>36.</u>
2. Commission Proposal.....	<u>39.</u>
C. Natural Gas Transportation Timely Nomination Cycle.....	<u>41.</u>
1. Background and Issues.....	<u>41.</u>
2. Commission Proposal.....	<u>48.</u>
D. Modified Intra-Day Nomination Timeline.....	<u>55.</u>
1. Background and Comments Received.....	<u>55.</u>
2. Commission Proposal.....	<u>63.</u>
E. Clarification Regarding the “No-Bump” Rule for Pipelines with Enhanced Nomination Services.....	<u>71.</u>
F. Multi-Party Transportation Contracts.....	<u>76.</u>
III. Notice of Use of Voluntary Consensus Standards.....	<u>82.</u>
IV. Information Collection Statement.....	<u>83.</u>
V. Environmental Analysis.....	<u>87.</u>
VI. Regulatory Flexibility Certification.....	<u>88.</u>
VII. Comment Procedures.....	<u>90.</u>

VIII. Document Availability ..... [94.](#)

List of Tables, Figures, and Equations

Table 1: NAESB Gas Nomination Cycles ..... [16.](#)

Figure 1 - Recent winter load – Eastern and Central Regions (non-holiday weekdays, Dec.-Feb.) ..... [40.](#)

Figure 2 - Recent winter load – Mountain and Pacific Regions (non-holiday weekdays, Dec.-Feb.) ..... [40.](#)

Table 2: Electric Commitment Results Publication Timetable ..... [43.](#)

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NOTICE OF PROPOSED RULEMAKING

(March 20, 2014)

1. In this Notice of Proposed Rulemaking (Proposed Rule or NOPR), and in two contemporaneous orders, the Federal Energy Regulatory Commission (Commission) is proposing interrelated actions to address certain natural gas and electric industry coordination challenges that arise, in part, from increased reliance on natural gas for electricity generation. The Commission's proposed actions focus primarily on the scheduling practices of the natural gas transportation and electricity markets. The reforms proposed herein and the two contemporaneous orders build upon the comments made during Commission staff technical conferences and in comments filed in Docket No. AD12-12-000.

2. In this Proposed Rule, the Commission proposes to amend its regulations at section 284.12 relating to the scheduling of transportation service on interstate natural gas pipelines to better coordinate the scheduling practices of the natural gas and electricity industries, as well as to provide additional scheduling flexibility to all shippers on interstate natural gas pipelines. In a separate order, the Commission is instituting a

proceeding, under section 206 of the Federal Power Act (FPA),<sup>1</sup> to coordinate the day-ahead scheduling of Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) with the revised interstate natural gas pipeline schedule.<sup>2</sup> In addition, in a separate order, the Commission is also instituting a proceeding, under section 5 of the Natural Gas Act (NGA),<sup>3</sup> to examine whether interstate natural gas pipelines are providing notice of offers to purchase released pipeline capacity in accordance with section 284.8(d) of the Commission's regulations.<sup>4</sup>

3. The Commission's existing regulations<sup>5</sup> regarding interstate natural gas pipelines' scheduling incorporate by reference the standards of the North American Energy Standards Board (NAESB) Wholesale Gas Quadrant (WGQ), a consensus standards organization representing all segments of the natural gas industry as well as the wholesale electric power industry.<sup>6</sup> Since 1996 these standards have established nationwide

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<sup>1</sup> 16 U.S.C. § 824e (2012).

<sup>2</sup> *California Independent System Operator Corp., et al.*, Order Initiating Investigation into ISO/RTO Scheduling Practices and Establishing Paper Hearing Procedures, 146 FERC ¶ 61,202 (2014).

<sup>3</sup> 15 U.S.C. § 717d.

<sup>4</sup> *Posting of Offers to Purchase Capacity*, 146 FERC ¶ 61,203 (2014). *See also* 18 CFR 284.8(d)(2013).

<sup>5</sup> *See* 18 CFR 284.12(a) and (b) (2013).

<sup>6</sup> NAESB is accredited by the American National Standards Institute (ANSI) as an

(continued ...)

timelines that the industry and the Commission have determined most efficiently schedule natural gas transactions across interconnecting pipelines. This standardized nomination timeline has resulted in a complementary standard timeframe in which parties acquire natural gas supplies.

4. The Commission meanwhile has accepted regional variation in the development of scheduling practices in ISO and RTO markets, each of which has established its own timelines for submission of bids and posting of awards.

5. While the nationwide natural gas nomination timeline has proven resilient over the last 17 years, recent developments in electricity markets signal that changes to the gas nomination schedule may be needed. Reliance on natural gas as a fuel for electric generation has steadily increased in recent years.<sup>7</sup> This trend is expected to continue, resulting in greater interdependence between the natural gas and electric industries.<sup>8</sup>

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accredited standards organization, which ensures that NAESB complies with ANSI's requirements that its procedures are open to materially affected parties and that the standards represent a reasonable consensus of the industry without domination by any single interest or interest category.

<sup>7</sup> See, e.g., Energy Information Administration, *Fuel Competition in Power Generation and Elasticities of Substitution* (June 2012); ISO-NE, *Addressing Gas Dependence* at 3 (July 2012) (reliance on natural gas-fired electricity in the region increased from five percent in 1990 to 51 percent in 2011), [http://www.iso-ne.com/committees/comm\\_wkgrps/strategic\\_planning\\_discussion/materials/natural-gas-white-paper-draft-july-2012.pdf](http://www.iso-ne.com/committees/comm_wkgrps/strategic_planning_discussion/materials/natural-gas-white-paper-draft-july-2012.pdf).

<sup>8</sup> See, e.g., North American Electric Reliability Corporation, *2013 Special Reliability Assessment: Accommodating an Increased Dependence on Natural Gas for*

(continued ...)

Several events over the last few years, such as the Southwest Cold Weather Event,<sup>9</sup> and the recent extreme and sustained cold weather events in the eastern U.S. in January 2014,<sup>10</sup> show the crucial interrelationship between natural gas pipelines and electric transmission operators and underscore the need for improvements in the coordination

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*Electric Power; Phase II: A Vulnerability and Scenario Assessment for the North American Bulk Power System* at 1 (May 2013) (“Over the past decade, natural gas-fired generation rose significantly from 17 percent to 25 percent of U.S. power generation and is now the largest fuel source for generation capacity. Gas use is expected to continue to increase in the future, both in absolute terms and as a share of total power generation and capacity.”);

[http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC\\_PhaseII\\_FINAL.pdf](http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_PhaseII_FINAL.pdf); Energy Information Administration, *Annual Energy Outlook 2013 Early Release Overview* (2013) (showing electric generation from natural gas rising from 13 percent in 1993 to 30 percent in 2040);

[http://www.eia.gov/forecasts/aeo/er/early\\_elecgen.cfm](http://www.eia.gov/forecasts/aeo/er/early_elecgen.cfm); The New England State Committee on Electricity, *Natural Gas Infrastructure and Electric Generation: A Review of Issues Facing New England* (Dec. 14, 2012), [http://www.nescoe.com/uploads/Phase\\_I\\_Report\\_12-17-2012\\_Final.pdf](http://www.nescoe.com/uploads/Phase_I_Report_12-17-2012_Final.pdf).

<sup>9</sup> See FERC/NERC, *Report on Outages and Curtailments During the Southwest Cold Weather Event of February 1-5, 2011* (2011), available at <http://www.ferc.gov/legal/staff-reports/08-16-11-report.pdf>.

<sup>10</sup> The widespread and record low temperatures during January 2014 resulted in coincident record peak demand for natural gas throughout the Midwest, Northeast, Mid-Atlantic, and Southeast regions leading to constrained pipeline capacity and high natural gas prices. In addition, in February 2014, arctic temperatures limited the availability of natural gas to supply New Mexico and Southern California leading CAISO to issue a system alert and a request for consumers to reduce power demand around the system. CAISO invoked increasingly stringent measures throughout the day to move generation off natural gas, reduce demand, and maintain sufficient supply to meet firm load. See FERC Staff Presentation “Recent Weather Impacts on the Bulk Power System” January 16, 2014, <http://www.ferc.gov/CalendarFiles/20140116102908-A-4-Presentation.pdf>.

of natural gas and electric markets. The differences between the nationwide natural gas scheduling timeline and the regional electric scheduling timelines can create complications for interstate pipelines and electric transmission operators in coordinating the scheduling of the two industries.

6. In light of these concerns, the Commission, since early 2012, has engaged in a dialogue with natural gas pipelines, electric transmission operators, and other market participants and stakeholders in both industries regarding natural gas and electric industry coordination.<sup>11</sup> In a report issued on November 15, 2012, Commission staff noted that, among other topics, industry participants highlighted the need for greater alignment of natural gas and electric scheduling practices.<sup>12</sup> At the direction of the Commission, staff conducted a further technical conference in April 2013 to consider natural gas and electric scheduling practices, where participants again discussed, among other matters, whether and how natural gas and electric industry schedules could be harmonized in order to achieve the most efficient scheduling systems for both industries, whether

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<sup>11</sup> See *Coordination Between Natural Gas and Electricity Markets*, Docket No. AD12-12-000 (Feb. 15, 2012), available at <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12893828>.

<sup>12</sup> *Staff Report on Gas-Electric Coordination Technical Conferences*, Docket No. AD12-12-000 (Nov. 15, 2012) (November Staff Report), available at [http://elibrary.ferc.gov/idmws/File\\_List.asp](http://elibrary.ferc.gov/idmws/File_List.asp).

additional nomination opportunities for natural gas transportation can be provided and, if so, under what conditions.<sup>13</sup>

7. During the technical conference, some ISOs and RTOs expressed concern about the potential reliability effects on their systems if gas-fired generators encounter difficulty in acquiring natural gas or are subject to curtailment of natural gas supplies, particularly during periods of high demand on both the interstate pipeline and electric transmission systems. Interstate pipelines expressed similar concern about the effect on their ability to deliver natural gas when electric generators are dispatched and need to burn more natural gas than they have nominated. Generators and transmission operators raised concerns that managing fuel procurement risk can be a challenge because of the different operating days used by the natural gas and electric industries and because the timeframe for nominating natural gas pipeline transportation service is not synchronized with the timeframe during which generators receive confirmation of their bids in the day-ahead electric markets. These differing timelines can cause significant price and/or supply risk for gas-fired generators because, to obtain the best gas price, the generators would need to nominate pipeline transportation service before they know if their electric

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<sup>13</sup> *Coordination between Natural Gas and Electricity Markets*, Docket No. AD12-12-000 (Mar. 5, 2013) (Notice of Technical Conference), available at [http://elibrary.ferc.gov/idmws/File\\_list.asp?document\\_id=14095482](http://elibrary.ferc.gov/idmws/File_list.asp?document_id=14095482).

bid has been confirmed.<sup>14</sup> Generators, including generators in non-RTO markets, raised concerns about the flexibility of the gas scheduling system to accommodate their need to revise nominations in light of weather events or other operational needs. Several conference participants stressed that, due to the difficult policy questions involved, they would need Commission policy guidance before they would be able move forward on coordination of their existing scheduling practices.

8. Based on the current trend of increased use of natural gas as a fuel for electric generation, and in consideration of the discussions at the 2012-2013 technical conferences and filed comments, the Commission is proposing a set of related actions to address concerns regarding the impacts of divergent interstate natural gas pipeline and electric utility scheduling practices, as well as concerns regarding the flexible and efficient use of pipeline capacity by natural gas-fired generators and other shippers.<sup>15</sup>

The Commission has identified three major areas in which revisions to the nationwide

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<sup>14</sup> November Staff Report at 32.

<sup>15</sup> The Commission has recognized that even the most efficient standards need to be modified to accord with changing realities. *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587, 61 FR 39053 (July 26, 1996), FERC Stats. & Regs. Regulations Preambles July 1996 – December 2000 ¶ 31,038, at 30,060 (1996). See American National Standards Institute, *ANSI Essential Requirements: Due Process Requirements for American National Standards* § 4.7.1 (accessed 12/8/13) (requiring periodic updates of standards); Eviatar Zerubavel, *The Standardization of Time: A Sociohistorical Perspective*, 88 *American Journal of Sociology* 1, 5-7 (July 1982) (uniform standards of time are needed to coordinate industries).

natural gas scheduling system seem appropriate. Therefore, in this Proposed Rule, the Commission is proposing to:

- a. Start the natural gas operating day (Gas Day) earlier in order to ensure that gas-fired generators are not running short on gas supplies during the morning electric ramp periods. The Commission is proposing to move the start of the Gas Day from 9:00 a.m. Central Clock Time (CCT) to 4:00 a.m. CCT.<sup>16</sup>
- b. Start the first day-ahead gas nomination opportunity (Timely Nomination Cycle) for pipeline scheduling later than the current 11:30 a.m. CCT. Due to the fact that the Timely Nomination Cycle is the most liquid of the gas nomination cycles, this change will allow electric utilities to finalize their scheduling before gas-fired generators must make gas purchase arrangements and submit nomination requests for natural gas transportation service to the pipelines. The Commission is proposing to move the Timely Nomination Cycle to 1:00 p.m. CCT.<sup>17</sup>
- c. Modify the current intraday nomination timeline to provide four intraday nomination cycles, instead of the existing two, to provide greater flexibility

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<sup>16</sup> The NAESB WGQ standards refer to Central Clock Time which reflects daylight savings changes.

<sup>17</sup> The Commission is not proposing any changes to the Evening Cycle.

to all pipeline shippers. The Commission is proposing to revise the existing standard intraday nomination cycles, including adding an early morning nomination cycle with a mid-day effective flow time and a new late-afternoon nomination cycle during which firm nominations would have precedence over or be permitted to bump already scheduled interruptible service. However, bumping would not be permitted during the proposed final intraday nomination cycle. In summary, the Commission is proposing to provide four standard intraday nomination cycles to occur at 8:00 a.m. CCT (bump), 10:30 a.m. CCT (bump), 4:00 p.m. CCT (bump) and 7:00 p.m. CCT (no-bump).<sup>18</sup>

9. The Commission also clarifies in this Proposed Rule its policy concerning the ability of a pipeline to permit firm shippers to bump an interruptible shipper's nomination during any enhanced nomination opportunity proposed by the pipeline (beyond the standard nomination opportunities). We also propose to require all interstate pipelines to offer multi-party service agreements, similar to those already offered by some interstate pipelines. Such multi-party service agreements can provide multiple shippers the flexibility to share interstate pipeline capacity to serve complementary needs in an efficient manner.

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<sup>18</sup> See the Appendix for a Table summarizing the Commission's proposed scheduling timeline.

10. Although we present specific proposed reforms to existing natural gas industry scheduling practices in this Proposed Rule, we continue to recognize that the natural gas and electricity industries are best positioned to work out the details of how changes in scheduling practices can most efficiently be made and implemented, consistent with the policies discussed here. Therefore, we are providing the natural gas and electric industries, through NAESB, with a period of 180 days after publication of the Proposed Rule in the *Federal Register* to reach consensus on any revisions to the Commission's proposals and either file consensus standards with the Commission or notify the Commission of its inability to reach consensus on any revisions to the Commission's proposals. The Commission appreciates the recent work of the Natural Gas Council (NGC), the Desert Southwest Pipeline Stakeholders (DSPS), and others to formulate proposals for Commission consideration. These efforts represent a significant step forward in helping to address the scheduling issues confronting the natural gas and electric industries, and we encourage these parties to continue their work and participate in the NAESB process to formulate a consensus proposal, consistent with the policies discussed herein. In addition, while the proposals in this Proposed Rule focus on natural gas industry regulations, we expect the electric industry (particularly the ISOs and RTOs) to participate in these efforts to help ensure that the resulting consensus reasonably accommodates the interests of both industries.

11. In the event that NAESB is able to reach a consensus on revisions to the Commission's proposals, comments on those consensus standards, as well as comments on the Commission's proposals, are to be filed 240 days after publication of the Proposed Rule in the *Federal Register*. Because NAESB is an ANSI accredited consensus standards organization, the Commission could incorporate by reference in a final rule consensus standards filed by NAESB.<sup>19</sup> In the event that NAESB is unable to reach a consensus on any revisions to the Commission's proposals, comments on the Commission's proposals also are to be filed 240 days after publication of the Proposed Rule in the *Federal Register*. If the Commission adopts regulations that have not been approved by NAESB, it will expect NAESB to integrate the Commission's regulations into its standards within 90 days of the effective date of the final rule and to notify the Commission when the standards have been approved.

## **I. Background**

12. In order to put these related Commission actions in context, we first provide a description of the current interstate natural gas and electric utility scheduling systems and the issues raised during the Commission conferences and in filed comments in Docket No. AD12-12-000.

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<sup>19</sup> Pub L. No. 104-113, 12(d), 110 Stat. 775 (1996), 15 U.S.C. 272 note (1997); OMB Circular A-119 (agency "must use voluntary consensus standards, both domestic and international, in its regulatory" as well as procurement activities).

A. **Current Natural Gas and Electric Scheduling Systems**

1. **Nationwide Scheduling for Natural Gas Interstate Pipeline Transportation**

13. The nationwide natural gas standards originated in 1995, when all segments of the natural gas industry agreed to form the Gas Industry Standards Board (GISB) (the precursor to NAESB) as its vehicle to formalize the creation of industry-wide communication standards.<sup>20</sup> Later in 1995, after conducting an industry technical conference, the Commission issued an Advanced Notice of Proposed Rulemaking (ANOPR), requesting the submission of proposals by GISB to standardize business practices across the interstate natural gas pipeline grid.<sup>21</sup> One of the Commission's principal concerns was the standardization of nomination and confirmation schedules.

14. After the issuance of the ANOPR, the industry mobilized under the GISB procedures, with over 500 individuals participating in 45 days of meetings over a period of 53 business days to produce consensus on a comprehensive set of business practice standards covering nominations and confirmations, flowing gas, invoicing, capacity

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<sup>20</sup> Under its charter and by-laws, GISB was open to all members of the gas industry and utilized open and balanced consensus voting procedures to ensure that a standard was acceptable to all industry segments.

<sup>21</sup> *Standards for Business Practices of Interstate Natural Gas Pipelines*, Advanced Notice of Proposed Rulemaking, 73 FERC ¶ 61,104 (1995).

release, and electronic communication.<sup>22</sup> The industry concluded that a nationwide timeline for scheduling and nominating natural gas transportation was needed given the interconnected nature of pipelines. As GISB stated, “the standard nomination timeline allows a shipper whose transaction spans more than one pipeline the certainty that the transaction will really ‘work’ as contemplated.”<sup>23</sup> In Order No. 587, the Commission incorporated these nationwide standards into its regulations, recognizing the need for nationwide, as opposed to regional scheduling, for interstate natural gas pipeline service.<sup>24</sup> Since 1996, the nationwide framework of scheduling timelines has remained in place, with numerous improvements and modifications, such as the addition in 1997 of standardized intraday nomination opportunities.<sup>25</sup>

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<sup>22</sup> *Standards for Business Practices of Interstate Natural Gas Pipelines*, Notice of Proposed Rulemaking, 61 FR 19211 (May 1, 1996), FERC Stats. & Regs. Proposed-Regulations 1988-1998 ¶ 32,517, at 33,209 (1996).

<sup>23</sup> Order No. 587, FERC Stats. & Regs. ¶ 31,038, at 30,067.

<sup>24</sup> “An integrated pipeline grid means that an East Coast LDC can nominate gas from a producer located in any time-zone on the North American continent. If an upstream-downstream system or a regional system were used, the LDC would not get confirmation of the first leg of the journey until well after it gets confirmation of the final downstream leg (which is probably well after the close of its business day).” *Id.* at 30,068.

<sup>25</sup> See *Standards for Business Practices of Interstate Natural Gas Pipelines*; Order No. 587-G, 63 FR 20072 (Apr. 23, 1998), FERC Stats. & Regs. Regulations Preambles July 1996 – December 2000 ¶ 31,062 (1998); Order No. 587, FERC Stats. & Regs. ¶ 31,038, at 30,060 (recognizing that standards development requires continuous adaption to changed circumstances: “standards development is not like a sculptor forever casting

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15. The natural gas scheduling system is based on several underlying principles. First, the Gas Day is standard nationwide, beginning at 9:00 a.m. CCT and ending at 9:00 a.m. CCT the following day. All nominations for transportation service are for a daily quantity to be transported over that 24-hour period. The rate at which a shipper may use its contracted quantity, also known as a flow rate, on a given pipeline is determined by the individual pipeline's tariff and the flexibility of that pipeline to permit non-ratable flows. Except for special services, pipeline services are generally based on the assumption of uniform hourly flows over the Gas Day. While Table 1 below lists the effective times for nominations, changes to these nominations are limited by the remainder of a shipper's daily quantity and the remaining hours of the Gas Day.<sup>26</sup>

Second, interstate natural gas pipelines schedule their systems based on the priority of the transportation contract held by the shipper. Nominations of firm transportation from a primary receipt point to a primary delivery point (primary firm nominations) have the

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his creation in bronze, but like a jazz musician who takes a theme and constantly revises, enhances, and reworks it").

<sup>26</sup> For example, if a shipper with a contract for 2,400 Dth/day, schedules 1,200 Dth at the Timely Nomination Cycle, and submits an intraday nomination at the Intra-Day 1 cycle, that shipper can increase its scheduled capacity, assuming capacity availability, by no more than 1,600 Dth, bringing its total scheduled quantity to 2,000 Dth/day. This occurs because the shipper has already operated for eight hours based on a daily nomination of 1,200 Dth (50 Dth/hour). (8 hrs \* 50 = 400 Dth). This leaves the shipper only 16 hours to increase its flow rate to 100 Dth/hr, bringing its total daily quantity to 2,000 Dth (400 Dth for the first 8 hours + 1,600 for the remaining 16 hours).

highest priority,<sup>27</sup> followed by secondary–firm, within-the-path<sup>28</sup> nominations, secondary-firm, outside of the path nominations, and finally nominations from shippers holding interruptible transportation capacity.

16. The current NAESB WGQ standards establish four standard nomination periods (i.e., periods during which a shipper can request transportation service under its contract) for a Gas Day. As summarized in the figure below, the first two nomination opportunities occur the day before gas flows, and the second two opportunities occur during the day of gas flow.

**Table 1: NAESB Gas Nomination Cycles**

<b>Nomination Cycle</b>	<b>Nomination Deadline (CCT)</b>	<b>Notification of Schedule (CCT)</b>	<b>Nomination Effective (CCT)</b>	<b>Bumping of IT</b>
Timely	11:30 a.m.	4:30 p.m.	9:00 a.m. Next Day	N/A
Evening	6:00 p.m.	10:00 p.m.	9:00 a.m. Next Day	Yes
Intra-Day 1	10:00 a.m.	2:00 p.m.	5:00 p.m. Current Day	Yes

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<sup>27</sup> A firm shipper’s primary receipt and delivery points are listed in its service agreement and define the guaranteed firm transportation service the pipeline has contracted to provide that shipper. The Commission also requires pipelines to permit shippers to use all other points in the rate zones for which they pay on a secondary-firm basis.

<sup>28</sup> Secondary-firm nominations are firm nominations that include at least one secondary point. Within-the-path nominations are nominations where the secondary nomination point is contained wholly within the primary points listed in the shipper’s contract.

<b>Nomination Cycle</b>	<b>Nomination Deadline (CCT)</b>	<b>Notification of Schedule (CCT)</b>	<b>Nomination Effective (CCT)</b>	<b>Bumping of IT</b>
Intra-Day 2	5:00 p.m.	9:00 p.m.	9:00 p.m. Current Day	No

Before a pipeline schedules a shipper's requested quantity under these standards, the pipeline confirms the shipper's nomination with upstream and downstream parties to make sure the shipper has contracted for sufficient gas with an upstream supplier to fulfill its nomination, and to ensure the downstream entity, such as a Local Distribution Company (LDC), has sufficient capacity to accept that gas.

17. The Timely Nomination Cycle is the most liquid time to acquire both natural gas supply and transportation capacity. During that cycle, all of the pipeline's nomination priorities are in effect: primary-firm nominations have priority over secondary-firm nominations, and secondary-firm nominations have priority over interruptible transportation.<sup>29</sup> In subsequent nomination cycles, firm service scheduled in an earlier cycle cannot be displaced or bumped by another firm nomination for that Gas Day.<sup>30</sup> In addition, firm intraday nominations have priority over, and thus can displace or bump

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<sup>29</sup> See P 14 *supra*.

<sup>30</sup> *Transwestern Pipeline Company*, 99 FERC ¶ 61,356, at P 12 (2002) ("the Commission's long standing policy on firm service is that once scheduled, whether at primary or alternate points, the service may not be bumped by a nomination by another firm shipper").

scheduled and flowing interruptible transportation.<sup>31</sup> This policy recognizes that “firm shippers are paying reservation charges for priority rights and those rights should include the right to have a nomination become effective as early as possible on the Gas Day following the nomination.”<sup>32</sup> However, the final intraday nomination (Intra-Day 2) cycle is a “no-bump” cycle, meaning that interruptible transportation previously arranged for cannot be displaced or bumped by a firm Intra-Day 2 nomination. In approving this arrangement (referred to as the “No-Bump Rule”), the Commission found that it would create a fair balance between firm and interruptible shippers and provide necessary stability in the nomination system.

18. Individual pipelines may offer additional scheduling opportunities beyond the standard nomination cycles. However, shippers transporting gas over multiple pipeline systems may have limited ability to utilize these additional scheduling opportunities if the upstream or downstream pipelines cannot confirm those scheduling changes. Currently, several pipelines offer additional nomination cycles.<sup>33</sup>

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<sup>31</sup> 18 CFR 284.12(b)(1)(i) (2013); Order No. 587-G, FERC Stats. & Regs. ¶ 31,062 at 30,672.

<sup>32</sup> *Id.* at 30,671.

<sup>33</sup> *See, e.g., Texas Gas Transmission LLC*, 137 FERC ¶ 61,093 (2011), *order on compliance*, 138 FERC ¶ 61,176 (2013) (*Texas Gas*); *Gulf South Pipeline Company LP*, 141 FERC ¶ 61,262 (2012).

## 2. Electric Scheduling

19. Scheduling practices in the electric industry vary by region. In terms of processes that are run by the ISOs and RTOs, the practice of scheduling resources generally includes the commitment and dispatch of sufficient, deliverable generation to supply load in a least cost manner, all based on generator availability and the transmission facilities that will be in service that day. These processes for scheduling resources also account for imports and exports, the provision of ancillary services, and contingencies that may limit the availability of certain generation or transmission assets during the operating day.

20. To perform the unit commitment and dispatch processes used to develop daily resource schedules, ISOs and RTOs collect supply offers from generators and expected demand from load serving entities. The ISOs and RTOs then run market algorithms that, accounting for transmission constraints and other operational limitations, determine the least cost set of resources that can be used to serve load. Additionally, each ISO and RTO also performs a reliability unit commitment process to procure resources, in addition to those resources committed to serve the load bid into the day-ahead market, as necessary to meet the ISO's or RTO's own forecast of the next day's load and, in some cases, other system needs. These reliability processes vary in each ISO and RTO – both in name and in details of implementation.

21. In terms of when resource scheduling processes take place, for most electric utilities the 24-hour operating day begins at 12:00 a.m. local time. In ISO and RTO regions, the system operators run the day-ahead unit commitment and dispatch in the day

leading up to the operating day. Once these processes are run, they become effective at the beginning of the operating day. Each ISO and RTO establishes its own timing for executing the day-ahead and reliability scheduling processes, including the times of day when bids and offers are due to the system operator, when the market and reliability processes are run, and when the results of the scheduling processes are made available to generators. The individual ISO and RTO day-ahead schedules are discussed in greater detail below.

In non-ISO and RTO systems, the Commission's *pro forma* OATT specifies that firm interchange schedules need to be submitted by 10:00 a.m. day-ahead or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider.<sup>34</sup>

### **3. Commission Conferences**

22. As noted above, the Commission has engaged in an extensive dialogue with industry on gas-electric coordination issues. These efforts were first formalized on February 15, 2012, when the Commission issued a notice in Docket No. AD12-12-000 requesting comments on various aspects of gas-electric interdependence and coordination

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<sup>34</sup> *Pro forma* OATT §13.8. Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 2:00 p.m. of the day prior to commencement of such service. *Pro forma* OATT §14.6.

in response to questions posed by members of the Commission.<sup>35</sup> In order to better understand the interface between the electric and natural gas pipeline industries and identify areas for improved coordination, the questions covered a variety of topics including market structures and rules, scheduling, communications, infrastructure and reliability. In response to the notice, the Commission received comments from 79 entities that raised concerns, including the need for alignment of natural gas and electric scheduling.

23. During August 2012, the Commission convened five regional conferences for the purpose of exploring these issues and obtaining further information from the electric and natural gas industries regarding coordination between the industries. Representatives from a cross-section of both industries attended the regional conferences, with total attendance exceeding 1,200 registrants. As noted above, the November Staff Report following these conferences stated that, among other topics, participants highlighted the need for alignment of natural gas and electric scheduling. Generators participating in the

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<sup>35</sup> *Coordination Between Natural Gas and Electricity Markets*, Docket No. AD12-12-000 (Feb. 15, 2012) (Notice Assigning Docket No. and Requesting Comments), available at <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12893828>. See also Commissioner Philip D. Moeller, *Request for Comments of Commissioner Moeller on Coordination between the Natural Gas and Electricity Markets* (Feb. 3, 2012), available at <http://www.ferc.gov/about/com-mem/moeller/moellergaselectricletter.pdf>; Commissioner Cheryl A. LaFleur, *Statement regarding Standards for Business Practices for Interstate Natural Gas Pipelines* (Feb. 16, 2012), available at <http://www.ferc.gov/media/statements-speeches/lafleur/2012/02-16-12-lafleur-G-1.asp>.

ISO and RTO markets stated that managing fuel procurement risk can be a challenge because the natural gas and electric operating days are not aligned. Many participants voiced concerns related to whether establishing a standard energy day for both industries is warranted, whether and how utilities can most effectively match their scheduling times with the nationwide natural gas scheduling timeline, whether additional nomination opportunities for natural gas can be provided and, if so, under what conditions.

Participants also pointed out that changes to natural gas scheduling practices can have national implications given the operational structure of the pipeline system and that whether changes to the scheduling practices of the natural gas or electric industries are necessary to better align these two markets has been a matter of debate among the industries for a number of years.

24. On November 15, 2012, the Commission issued an order directing further technical conferences and reports.<sup>36</sup> In this order, the Commission recognized that questions raised at the conferences, related to scheduling and other issues, were of sufficient importance that they warranted a separate technical conference to focus on the details relating to scheduling.<sup>37</sup> Therefore, the Commission directed, among other things,

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<sup>36</sup> *Coordination Between Natural Gas and Electricity Markets*, 141 FERC ¶ 61,125 (2012) (November 15 Order).

<sup>37</sup> *Id.* P 6.

that Commission staff convene a technical conference to identify areas in which additional Commission guidance or potential regulatory changes could be considered.<sup>38</sup>

25. Pursuant to the November 15 Order, the Commission held a technical conference on April 25, 2013 (April 2013 technical conference) regarding natural gas and electric scheduling practices, and issues related to whether and how natural gas and electric industry schedules could be harmonized in order to achieve the most efficient scheduling systems for both industries.<sup>39</sup> More than 300 persons, representing a cross-section of industry, participated in the April 2013 technical conference, and discussed four major topic areas: natural gas and electric operating day, natural gas nomination cycles, the No-Bump Rule, and electric scheduling and market rules.<sup>40</sup>

26. The participants in these conferences identified a number of specific areas in which the differences between the nationwide natural gas schedule and the regional electric schedules can affect the ability to provide reliable service and may create inefficiencies in scheduling that result in less cost effective use of resources. The major

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<sup>38</sup> *Id.* P 8.

<sup>39</sup> *Coordination Between Natural Gas and Electricity Markets*, Docket No. AD12-12-000 (Mar. 5, 2013) (Notice Of Technical Conference), available at [http://elibrary.ferc.gov/idmws/File\\_list.asp?document\\_id=14095482](http://elibrary.ferc.gov/idmws/File_list.asp?document_id=14095482).

<sup>40</sup> *Supplemental Notice of Technical Conference*, Docket, No. AD12-12-000, at 4-7 (Apr. 3, 2013) (Supplemental Notice of Technical Conference), available at [http://elibrary.ferc.gov:0/idmws/doc\\_info.asp?document\\_id=14104023](http://elibrary.ferc.gov:0/idmws/doc_info.asp?document_id=14104023).

issues identified by the participants were: 1) the discontinuity between the operating days of electric utilities (including ISOs and RTOs) and the standardized operating day of interstate natural gas pipelines; 2) the lack of coordination between the day-ahead process for nominating interstate natural gas pipeline transportation services and the day-ahead process for scheduling electric generators, particularly those of the ISOs and RTOs; and 3) the lack of intraday nomination opportunities on interstate natural gas pipelines, which may limit the ability of gas-fired electric generators, as well as other shippers, to revise their nominations during the operating day.

## **II. Discussion**

### **A. Overview**

27. The growing reliance on natural gas as a fuel for electric generation, combined with differences in business practices between the two industries, has the potential to create challenges for interstate natural gas pipelines, electric transmission operators and electric generators in assuring reliable and efficient operations. This problem is particularly acute for some ISOs and RTOs and those gas-fired generators operating in their markets. At the same time, in areas of the country where bilateral markets are prevalent and storage is minimal, customers are looking for added flexibility. The Commission is proposing in this NOPR, and the related orders, to take actions that provide for better coordination in scheduling between the industries, while respecting the differences between the industries in their operational and business needs. These proposed reforms will help to ensure just and reasonable rates and terms and conditions

of service for both wholesale electric generation and transmission and natural gas transportation.

28. Scheduling practices on the interstate natural gas pipeline system and electric transmission systems are similar in some respects. For both systems, planning and scheduling take place one day ahead of the operating day based on weather forecasts and other factors affecting demand. In addition, scheduling on both systems needs to be adjusted during the operating day as energy supply and demand factors change.

However, physical and operational differences exist between the systems. Due in part to limited electric storage, electric transmission operators continuously and near instantaneously need to balance supply and demand to ensure the system remains in equilibrium. Natural gas, on the other hand, moves at a much slower rate than electricity.<sup>41</sup> Pipelines maintain balance between supply and demand through the use of linepack and operational storage, and allow for variations in customer deliveries from

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<sup>41</sup> See American Gas Association, “How Does the Natural Gas Delivery System Work?” at <http://www.aga.org/KC/ABOUTNATURALGAS/CONSUMERINFO/Pages/NGDeliverySystem.aspx> (last visited Dec. 17, 2013) (“Natural gas moves through the transmission system at up to 30 miles per hour, so it takes several days for gas from Texas to arrive at a utility receipt point in the Northeast”). While most pipelines schedule service based on an assumption of same day deliverability of natural gas from receipt to delivery point, this ability is provided through the pipeline’s ability to plan for nominated service by increasing line pack to support expected loads.

equal hourly flow rates on an as available or best-efforts basis.<sup>42</sup> As a result, an interstate pipeline must plan in advance so that it has sufficient linepack and/or storage to satisfy variations in expected hourly demand on the system. Such advance planning is particularly important for serving gas-fired generators, because electric generators can draw significant volumes of natural gas off a pipeline, sometimes as much as industrial users or a small city. Accordingly, increased use of natural gas by the electric industry can have a significant impact on the delivery capabilities of interstate natural gas pipelines.<sup>43</sup> Consequently, improvements in the coordination of the electric and natural gas nomination and scheduling practices could provide greater opportunities for gas-fired generators to obtain needed natural gas supplies and for pipelines to plan for their expected demands. Providing these opportunities will be beneficial for both industries in helping to ensure reliable and efficient operations.

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<sup>42</sup> During much of the year, most interstate natural gas pipelines can accommodate significant variations in hourly flow rates. However, during high demand periods when pipeline capabilities are being fully utilized to provide firm transportation services, a constrained pipeline may announce a critical notice period, where shippers are expected to stay in balance. Some pipelines also offer enhanced services that permit shippers to subscribe to services providing more variable hourly flow rates.

<sup>43</sup> See North American Electric Reliability Corp., *Special Reliability Assessment: A Primer of the Natural Gas and Electric Power Interdependency in the United States*, at 85-86 (Dec. 2011) (“the electric utility loads are as large, or larger, than many of the LDC loads and, in some cases, can exceed the capabilities of the smaller diameter pipelines”).

29. The Commission has identified specific areas of concern with respect to the lack of coordination between the scheduling practices of the industries. In most ISO or RTO markets, a natural gas-fired generator does not know if it is going to be dispatched until after the ISO or RTO processes day-ahead or real-time market bids and determines which resources are economical to run on a particular day or hour. Because day-ahead electric generation commitments generally occur after the natural gas transportation Timely Nomination Cycle, a natural gas-fired generator must either submit its nomination for natural gas transportation services before it knows when and how much electricity it will be committed to produce the next day, or it must wait until it receives its day-ahead commitment to nominate natural gas transportation services, with the risk that during some periods transportation capacity may not be available or economical, given the day-ahead market clearing price.<sup>44</sup> A generator that opts to see if it is scheduled before acquiring natural gas and pipeline transportation therefore will not be able to obtain natural gas and transportation during the time period when these markets are the most liquid.<sup>45</sup> While during many periods of the year interstate natural gas pipelines may have

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<sup>44</sup> A natural gas-fired generator also faces different risks depending on whether it enters into long-term natural gas purchase arrangements or relies on short-term spot market natural gas purchases.

<sup>45</sup> Currently, only NYISO provides the results of its day-ahead market clearing process to generators before the deadline for submitting natural gas transportation nominations for the Timely Nomination Cycle. *See* Table 2, below.

available capacity to provide service to gas-fired generators, during periods when the pipeline is constrained, the ability of generators to arrange transportation service when the market is most liquid may be critical to that gas-fired generators' ability to provide service.

30. Even in areas outside of the ISOs and RTOs, gas-fired generators have concerns regarding their ability to revise their pipeline nominations during the operating day to respond to changing weather conditions and other operational needs when capacity becomes constrained. Some natural gas-fired generators have sought to ensure reliability by subscribing to firm pipeline service, but have found that the standard, nationwide nomination opportunities for interstate natural gas pipeline transportation service may not provide them with sufficient opportunities to reschedule gas supplies for unanticipated weather events after the Timely Nomination Cycle.

31. The Commission concludes that these concerns, and other issues identified during our dialogues with industry, warrant further action in this proceeding and the two related proceedings we are instituting concurrently with this Proposed Rule. These concerns generally fall into two categories.

32. First, the Commission is concerned about the potential impact on the reliable and efficient operation of electric transmission systems and interstate natural gas pipelines of divergences between the start times of the natural gas and electric operating days, and mismatches in the timelines for scheduling interstate natural gas pipeline transportation

service and scheduling wholesale electric sales made by gas-fired generators for the next day. In particular, the Commission is concerned that

- 1) the current 9:00 a.m. Central Clock Time (CCT) start of the Gas Day occurs in the middle of the morning electric load ramp in some regions, creating a situation where electric load is increasing at the same time natural gas-fired generators may be running out of their daily nomination of natural gas, resulting in the gas-fired generator being unable to meet its obligations under the terms of their electric offers; and
- 2) in most ISO and RTO regions, the timelines for announcing the results of the day-ahead energy market process and committing generating units to run the next operating day occur after the deadline for the Timely Nomination Cycle (11:30 am CCT), meaning gas-fired generators are not certain they will be called upon to operate until after the period when pipeline capacity is most available and natural gas supply markets are most liquid.

33. Second, the Commission is concerned that existing interstate natural gas pipeline scheduling practices and the application of some of the Commission's regulations by pipelines may not provide sufficient flexibility to meet the needs of natural gas-fired generators, and could be limiting the efficient use of existing pipeline infrastructure, thereby making less capacity available to shippers (including natural gas-fired generators). Specifically, the limited number of standard intraday nomination cycles for

interstate natural gas pipeline transportation may not be sufficient to meet the needs of gas-fired generators to obtain capacity to deliver additional natural gas supplies during the electric operating day. In addition, even where interstate natural gas pipelines provide additional intraday opportunities to obtain transportation service, there appears to be a lack of clarity as to how the Commission's regulations regarding the "bumping" of interruptible customers should be applied to those additional nomination cycles. Finally, while some pipelines currently permit multiple shippers, including natural gas-fired generators, the flexibility to share pipeline capacity under a single firm transportation contract, the Commission's regulations do not require all pipelines to offer shippers this option.

34. We recognize that making modifications to the nationwide natural gas scheduling system and instituting the other reforms proposed in these three proceedings will not, and cannot, resolve all of the concerns that may arise with increased utilization of natural gas by electric generators. However, we conclude that the adjustments to the Gas Day and interstate natural gas pipeline nomination timeline proposed herein promise to provide significant assistance in helping to improve coordination of the natural gas and electric nomination and scheduling systems, while maintaining the substantial efficiencies gained through standardization of the natural gas scheduling system. The Commission intends that these reforms, along with the additional actions we propose in Docket Nos. EL14-22-

000, et al. and RP14-442-000, will serve to better ensure the reliable and efficient operation of both interstate natural gas pipeline and electricity systems.

35. While we are putting forth specific proposals (described in more detail below) in these areas, we continue to recognize that the natural gas and electricity industries are best positioned to work out the details of how changes in scheduling practices can most efficiently be made and implemented, consistent with the policies discussed here. For this reason, as noted above, we are providing time for the two industries to reach consensus on standards in these areas, including standards potentially different than the specific proposals herein. Participants in the NAESB process should explore whether consensus can be reached on any changes to the scheduling practices at issue in this Proposed Rule that would address the policy concerns identified herein. We urge both the natural gas and electric industries to once again marshal their resources and jointly consider all proposals and seek reasonable compromise on a broadly supported and comprehensive set of standards that will achieve the needed integration of the natural gas and electric industry scheduling practices.

## **B. Gas Day**

### **1. Background and Issues**

36. As noted, the natural gas and electric operating days are each 24 hours long, but they begin at different times. As a result, each electric operating day currently extends over two Gas Days and a gas-fired generator committed for one electric operating day must manage fuel and transportation arrangements across two Gas Days. Several

commenters in the Docket No. AD12-12-000 proceeding have indicated that the current Gas Day start time presents operational challenges because it occurs when gas-fired generation is critically needed to ensure that supply is available to match demand during the morning electric load ramp. As gas-fired generators approach the end of the Gas Day during the morning electric load ramp, they could exhaust either the contractual entitlements of their transportation contracts or their supply of natural gas.<sup>46</sup> In addition, the Gas Day start time straddles a time of peak gas demand for other pipeline shippers, such as LDCs.

37. In support of an earlier start to the Gas Day, ISO-NE and NYISO have expressed concern that gas-fired generators sometimes exhaust their daily gas entitlements before the end of the Gas Day and subsequently may not be able to meet increasing morning electricity demands during the last hours of the Gas Day. When this occurs, ISO-NE and NYISO assert that they must search for alternative available generating units while electric load is ramping up and approaching its morning peak. ISO-NE and NYISO commented that shifting the start of the Gas Day earlier would improve gas-electric coordination and, NYISO noted, would also improve reliability.<sup>47</sup> They noted that

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<sup>46</sup> Natural gas transportation contracts are based on volumetric entitlements over a single Gas Day.

<sup>47</sup> NYISO Comments, Docket No. AD12-12-000, at 5 (filed June 25, 2013); ISO-NE Comments, Docket No. AD12-12-000, at 9 (filed July 5, 2013).

moving the start of the Gas Day earlier would enable gas-fired resources needed for the peak morning period to timely nominate and schedule supply to support their ability to generate electricity at the start of the morning electrical peak,<sup>48</sup> and would provide generators more flexibility in attaining balancing services to avoid derating their units.<sup>49</sup> NYISO also argued that, as a result of its proposed change, any generator derates that occurred at the end of the Gas Day would occur during the overnight hours, which is a preferable period from an electric reliability perspective.<sup>50</sup>

38. Additional commenters noted support for or willingness to move the Gas Day start time earlier. In particular, INGAA and NGSA indicated willingness to consider moving the Gas Day earlier, but provided no specific suggestions on a new start time.<sup>51</sup> However, NGSA expressed concerns that an earlier start to the Gas Day may introduce safety risks associated with manual field operations for field crews.<sup>52</sup> For example, NGSA stated that currently a producer may need to divert gas from one pipeline

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<sup>48</sup> ISO-NE Comments, Docket No. AD12-12-000, at 9-10 (filed July 5, 2013).

<sup>49</sup> NYISO Comments, Docket No. AD12-12-000, at 5 (filed June 25, 2013); ISO-NE Comments, Docket No. AD12-12-000, at 9-10 (filed July 5, 2013).

<sup>50</sup> NYISO Comments, Docket No. AD12-12-000, at 5-6 (filed June 25, 2013).

<sup>51</sup> INGAA Comments, Docket No. AD12-12-000, at 7 (filed June 26, 2013); NGSA Comments, Docket No. AD12-12-000, at 9 (filed July 16, 2013).

<sup>52</sup> NGSA Comments, Docket No. AD12-12-000, at 9 (filed July 16, 2013).

connected to a field to another pipeline, because of price changes, market demand, or pipeline maintenance. NGSAs stated that starting the gas operating day when it is still dark raises safety concerns for employees making these adjustments. According to NGSAs, these concerns will result in either: (1) increased costs to light all production areas to avoid potential safety issues, or (2) a reduced ability to use more than one interconnected pipeline.<sup>53</sup> In addition, INGAA asserts that the Commission must ensure that producers are able to physically deliver natural gas into a pipeline if the Gas Day is moved to an earlier time; otherwise INGAA states that an earlier start may not be workable. PJM stated that moving the start of the Gas Day to 5:00 a.m. CCT could potentially be helpful because the peak electric period would no longer split the Gas Day.<sup>54</sup> While MISO stated it is not experiencing issues related to natural gas-fired unit derates, MISO indicated that it would support moving the start of the Gas Day earlier if it minimizes the uncertainty surrounding fuel procurement for gas-fired generators, as long as the nomination schedule did not also move to an earlier time.<sup>55</sup>

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<sup>53</sup> *Id.* n.7.

<sup>54</sup> PJM Comments, Docket No. AD12-12-000, at 5 (filed July 3, 2013).

<sup>55</sup> MISO Comments, Docket No. AD12-12-000, at 4 (filed July 3, 2013).

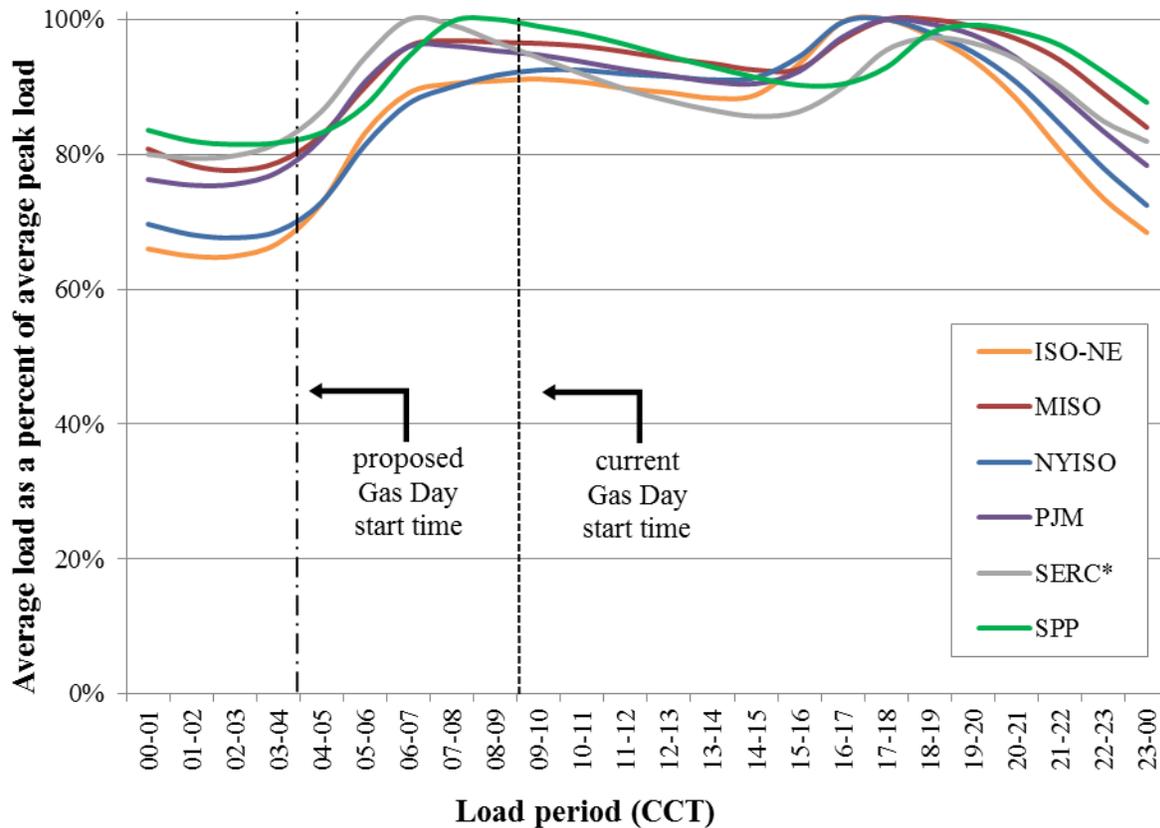
## 2. Commission Proposal

39. To alleviate some of the problems resulting from the misalignment of the gas and electric operating day, the Commission proposes to move the start of the Gas Day to earlier than its current 9:00 a.m. CCT time to better accommodate the load increase during the morning for both the electric and natural gas systems, which, in some time zones, begins prior to the 9:00 a.m. CCT start of the Gas Day. Moving the start of the Gas Day earlier should address instances in which gas-fired generators find that they are running out of scheduled natural gas capacity during the morning ramp period, and have to wait until 9:00 a.m. CCT before being able to rely on their next day gas nomination. As a consequence, gas-fired generators should be less likely either to incur imbalances on pipelines or inform electric transmission operators that they are unavailable.

40. The Commission is proposing to move the start of the Gas Day to 4:00 a.m. CCT. 4:00 a.m. CCT would preserve the nationwide scheduling efficiencies for natural gas, while reasonably accommodating the timing of morning electric ramp periods across all four time zones. As Figures 1 and 2 below show, a 4:00 a.m. CCT Gas Day start time would occur at the beginning of the morning electric ramp in the East, and before the morning electric ramp in other regions of the country. Moving the Gas Day to 4:00 a.m. CCT as compared to 9:00 a.m. CCT would mean that generators in all regions would be able to approach the morning electric peak, as well as most of the morning ramp period, with new daily gas nominations. This should largely eliminate the concern that some gas-fired generators will be unable to run during a substantial part of the morning ramp

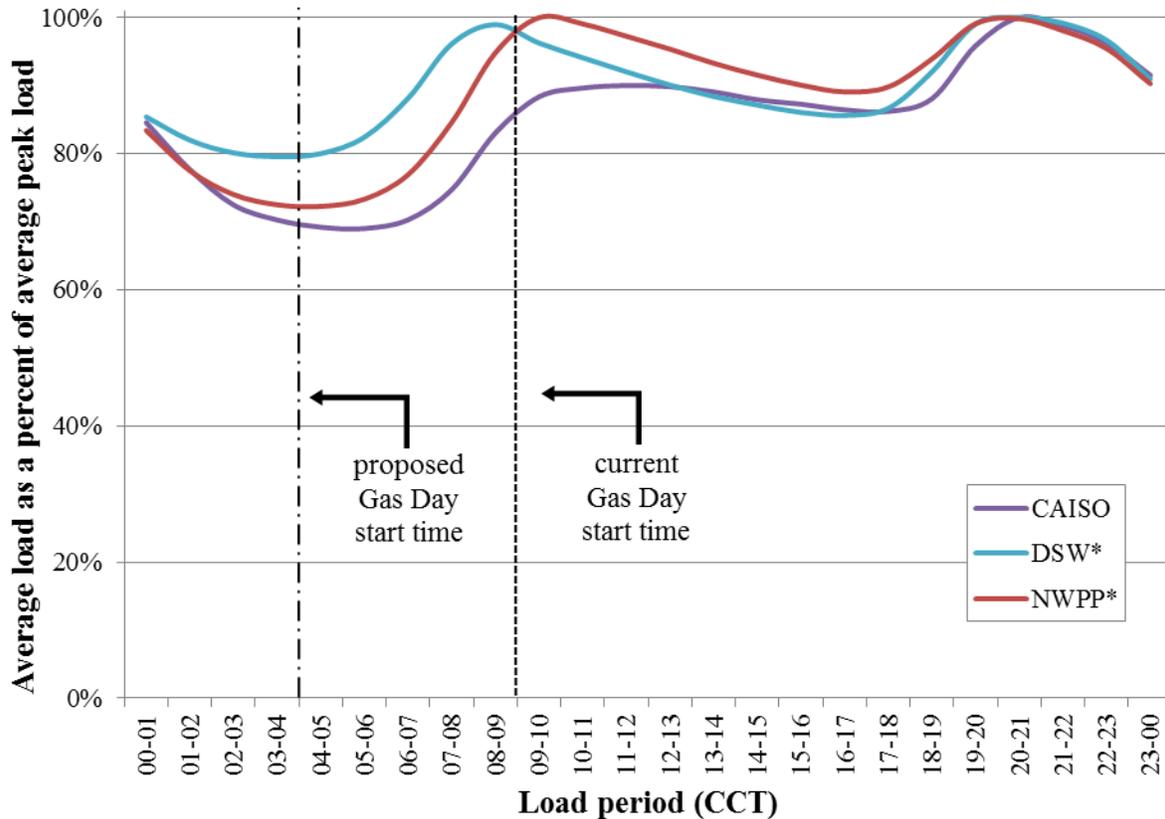
period, because they have burned through their nominated gas before the start of the next Gas Day.

**Figure 1 - Recent winter load – Eastern and Central Regions (non-holiday weekdays, Dec.-Feb.)<sup>56</sup>**



<sup>56</sup> Source: Velocity Suite. Data covers 2012/13 winter for all regions except SERC, which depicts 2011/12 winter. Figures 1 and 2 were created with data from Ventyx’s Energy Velocity software suite, which makes available a dataset of total hourly load for all North American ISOs and RTOs, and total hourly historical demand for certain non-ISO/RTO planning areas. From these datasets, Commission staff isolated data relating to the regions shown above, and focused on a “winter” period of December 2012, January 2013, and February 2013 (except where noted by an asterisk). Each line represents the average hourly load during said winter period for non-holiday weekdays and is normalized to the average peak load for that period by dividing by each line’s maximum value.

**Figure 2 - Recent winter load – Mountain and Pacific Regions (non-holiday weekdays, Dec.-Feb.)** <sup>57</sup>



The Commission recognizes that moving the start of the Gas Day to 4:00 a.m. CCT may result in increased costs to mitigate potential safety issues associated with employees conducting manual operations in the dark.<sup>58</sup> However, it is unclear the frequency with

<sup>57</sup> Source: Velocity Suite. Data covers 2012/13 winter for regions except DSW and NWPP, which depict 2011/12 winter.

<sup>58</sup> NGS Comments, Docket No. AD12-12-000, at 10 & n.7 (filed July 16, 2013).

which those circumstances occur.<sup>59</sup> On balance, the Commission finds that the overall benefits to both industries of moving the Gas Day earlier so that the morning ramp period for gas-fired generators and other gas consumers is included in a single Gas Day outweigh the potential for increased costs that may be incurred. In addition, as discussed below, we are also proposing changes in the intraday nomination cycles, which should minimize concerns expressed by NGSAs and others that an earlier start to the Gas Day may adversely affect the ability of shippers to balance their gas flows by the next Gas Day. Both industries should consider whether modifications to this proposal could reduce overall costs without unduly jeopardizing coordination between the industries.

### **C. Natural Gas Transportation Timely Nomination Cycle**

#### **1. Background and Issues**

41. In addition to the industries having different start times to their operating days, the natural gas and electric industries operate on different schedules within those days. As shown in Table 1 above, under the current NAESB WGQ Standard 1.3.2 and the Commission's regulations,<sup>60</sup> natural gas pipelines must offer pipeline shippers a

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<sup>59</sup> While NGSAs states that there are situations during the normal course of business in which a producer may need to make manual adjustments to divert gas from one pipeline to another, it does not state how often such adjustments are required or the extent to which those adjustments would need to be performed at the start of the Gas Day. NGSAs Comments, Docket No. AD12-12-000, at 10 & n.7 (filed July 16, 2013).

<sup>60</sup> 18 CFR 284.12 (2013).

minimum of four nomination opportunities to schedule natural gas transportation. Two of those standard nomination opportunities, the Timely Nomination Cycle and the Evening Nomination Cycle, occur the day before gas flows, while the other two nomination opportunities, Intra-Day 1 and Intra-Day 2, are revising nominations the day of gas flow. The Gas Day starts at 9:00 am CCT and natural gas pipeline customers are required to submit nominations for the Timely Nomination Cycle by 11:30 a.m. CCT.

42. As described above, wholesale electricity markets operated by the ISOs and RTOs also use a day-ahead energy market to set contractual commitments for the next operating day.<sup>61</sup> Market participants place day-ahead offers and bids to sell and purchase, and these participants must make such commitments prior to the close of the market. If the market clearing process accepts these commitments, they become binding for the following day. Additionally, each ISO and RTO also performs a reliability unit commitment process to procure resources, in addition to those resources committed to serve the load bid into the day-ahead market, as necessary to meet the ISO's or RTO's own forecast of the next day's load and, in some cases, other system needs.

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<sup>61</sup> SPP's Integrated Marketplace, including implementation of a day-two market launched March 1, 2014. See *Southwest Power Pool, Inc.*, 144 FERC ¶ 61,224 (2013). For the purposes of describing SPP's expected operation of its Integrated Marketplace in this order, we will refer to SPP's most recently approved schedules that the Commission accepted effective as of March 2014.

43. The following table represents the times that bids must be submitted and that the ISOs and RTOs post successful bids accepted in their respective day-ahead markets. As demonstrated by Table 2, all ISOs and RTOs (with the exception of NYISO) publicize accepted day-ahead dispatch bids after the current 11:30 a.m. CCT nomination deadline for the Timely Nomination Cycle for day-ahead natural gas transportation nominations.

**Table 2: Electric Commitment Results Publication Timetable**

<b>ISO/RTO</b>	<b>Time for Submission of Bids (CCT)</b>	<b>Time for Publication of Day-Ahead Commitment Bids (CCT)</b>
California Independent System Operator Corporation (CAISO)	12:00 p.m.	3:00 p.m.
ISO New England Inc. (ISO-NE)	9:00 a.m.	12:30 p.m.
PJM Interconnection, LLC (PJM)	11:00 a.m.	3:00 p.m.
Midcontinent Independent System Operator, Inc. (MISO)	10:00 a.m.	2:00 p.m.
New York Independent System Operator, Inc. (NYISO)	4:00 a.m.	10:00 a.m.
Southwest Power Pool, Inc. (SPP)	11:00 a.m.	4:00 p.m.

44. The market for acquiring natural gas supply is most liquid on weekday mornings between 8:00 a.m. and 9:00 a.m. CCT, prior to the Timely Nomination Cycle deadline, and the majority of shippers place nominations for next-day gas transportation service by

the Timely Nomination Cycle deadline.<sup>62</sup> Commenters assert that although natural gas supply can be purchased throughout the day through a limited secondary market, there is a premium for natural gas supply and interstate natural gas pipeline transportation capacity services procured after the Timely Nomination Cycle.<sup>63</sup> After the Timely Nomination Cycle, the Evening Nomination Cycle beginning at 6:00 p.m. CCT offers the only standard opportunity to reschedule gas transportation for the next Gas Day.

45. The issue arising from the current timing of the Timely Nomination Cycle is whether the electric markets are better served by notifying gas-fired generators of their dispatch requirements before the deadline for timely nominations or by allowing generators to determine the most current gas prices before they must submit their bids into the electric markets. Some generators prefer bidding into the ISO and RTO markets after the Timely Nomination Cycle deadline so their bids to supply electricity reflect the current natural gas prices, whereas other generators want to know if they have been committed by the ISO or RTO to operate before entering the market to obtain natural gas

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<sup>62</sup> November Staff Report at 31-32.

<sup>63</sup> Natural gas is traded in bilateral markets. Daily transactions are mostly consummated in the morning hours before the Timely Nomination Cycle deadline. The ability to find willing buyers and sellers to act as counterparties of a commodity transaction is greatest during these normal trading periods; the gas market is “liquid” during this time of day.

supply and interstate natural gas pipeline transportation capacity.<sup>64</sup> Some ISOs and RTOs are concerned that when their markets clear after the deadline for submitting nominations in the Timely Nomination Cycle generators may not have procured gas and transportation due to uncertainty with bids being accepted by the ISO/RTO. This fuel uncertainty may result in reliability problems if these generators ultimately cannot run as expected.<sup>65</sup>

46. INGAA filed comments indicating a willingness to move the Timely Nomination Cycle to 1:00 p.m. CCT to accommodate ISO and RTO needs on the condition that the ISOs and RTOs reevaluate their schedules for performing their market processes and committing generators to ensure that generators will learn from their ISO or RTO whether they will be dispatched before nominating for interstate natural gas pipeline transportation service.<sup>66</sup> INGAA contends that the Timely Nomination Cycle,

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<sup>64</sup> *See, e.g.*, Calpine Corporation Comments, Docket No. AD12-12-000, at 7 (filed Mar. 30, 2012) (“problems may occur when a unit that has not been scheduled for dispatch is called upon after the first day-ahead nomination period has passed.”); Equipower Resources Corp. Comments, Docket No. AD12-12-000, at 3-4 (filed Mar. 30, 2012) (“natural gas-fired generator is forced to purchase and nominate natural gas supplies before it knows whether its output will clear the day-ahead market and be assigned a generation commitment. . . . Consequently, a generator faces substantial risk that it did not purchase the correct volume of natural gas, potentially leaving it with a substantial surplus or deficiency of natural gas”).

<sup>65</sup> PJM Comments, Docket No. AD12-12-000, at 5 (filed July 3, 2013); NYISO Comments, Docket No. AD12-12-000, at 3 (filed June 28, 2013).

<sup>66</sup> INGAA Comments, Docket No. AD12-12-000, at 3 (filed June 26, 2013).

confirmation and scheduling process should occur during normal business hours to ensure the availability of counterparties necessary for the confirmation process.

Consistent with these comments, INGAA requests that the Timely Nomination Cycle, including the confirmation and scheduling notification processes, be completed no later than 5:00 p.m. CCT.<sup>67</sup>

47. NGSA similarly commented that any changes to the existing gas operating schedule must provide sufficient time between the Timely Nomination Cycle scheduling notification and the time that nominations are required for the next available cycle.<sup>68</sup>

NGSA notes that it is particularly critical that shippers not scheduled during the Timely Nomination Cycle have time to secure alternative gas supply and transportation arrangements during ordinary business hours. NGSA further notes that after nominations are submitted the confirmation process itself may require a series of time consuming communications, and suggests that operators need a minimum of two hours to communicate among all the relevant parties between the close of the Timely Nomination Cycle and the time in which nominations are confirmed, and possibly longer for instances in which interconnecting pipelines have non-conforming nomination cycles. Like

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<sup>67</sup> *Id.*

<sup>68</sup> NGSA Comments, Docket No. AD12-12-000, at 7-8 (filed July 16, 2013).

INGAA, NGSAs stresses that the confirmation deadline for the Timely Nomination Cycle must occur during normal business hours.

## 2. Commission Proposal

48. The Commission proposes to move the deadline for submitting nominations in the Timely Nomination Cycle later than the current 11:30 a.m. CCT deadline, to 1:00 p.m. CCT, in order to provide sufficient time for electric utilities to complete their processes for selecting generating resources to operate prior to this first, and most liquid, time in the natural gas supply and interstate natural gas pipeline transportation service markets. It appears that our objective of a later deadline for submitting nominations in the Timely Nomination Cycle can be accomplished without any other changes to the Timely Nomination Cycle or Evening Cycle timelines, including the 4:30 p.m. CCT deadline for the pipeline to provide notice of scheduled quantities. The three and a half hour period from 1:00 pm CCT to 4:30 p.m. CCT is consistent with INGAA and NGSAs's comments that several hours are needed for pipelines to confirm and provide scheduled quantities to shippers. However, the industry can consider whether any revisions or changes are necessary to accommodate a later Timely Cycle nomination deadline.

49. To make sure that ISO and RTO market clearing processes will sufficiently align with this later proposed nomination deadline for submitting nominations in the Timely Nomination Cycle, the Commission also is instituting a proceeding under section 206 of

the Federal Power Act (FPA)<sup>69</sup> (in a contemporaneous order in Docket No. EL14-22-000 et al.) to ensure that the ISOs and RTOs modify their day-ahead market processes and scheduling such that generators will receive dispatch instructions in sufficient time to be able to acquire natural gas and transportation by the start of the Timely Nomination Cycle (as revised in the instant proceeding) and to complete their supplemental reliability dispatch in sufficient time for generators to use the Evening Cycle. In addition, while the comments received by the Commission in Docket No. AD12-12-000 mainly discuss the effect of such a change on the ISO and RTO markets, a later Timely Nomination Cycle deadline also should help ensure that gas-fired generation resources in other regions are able to acquire interstate natural gas pipeline transportation capacity and natural gas supply in time for day-ahead commitments.<sup>70</sup>

50. Under the current scheduling timelines, a gas-fired generator in ISO and RTO markets that completes its scheduling after the Timely Nomination Cycle must decide whether (a) to line-up supply and nominate interstate natural gas pipeline transportation during the Timely Nomination Cycle without knowing whether the gas-fired generator's electric energy bid will subsequently clear the energy market; or (b) to wait to see

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<sup>69</sup> *California Independent System Operator Corp., et al*, Order Initiating Investigation into ISO/RTO Scheduling Practices and Establishing Paper Hearing Procedures, 146 FERC ¶ 61,202 (2014).

<sup>70</sup> *See Pro Forma OATT* §13.8 (firm day-ahead schedules must be submitted by 10:00 a.m. local time).

whether its bid clears the energy market, and then line-up fuel supply and natural gas pipeline transportation in a later nomination cycle. If a generator acquires natural gas and transportation prior to learning whether it is dispatched, it runs the risk of having to dispose of its natural gas supply and interstate natural gas pipeline transportation capacity during the less liquid Evening or Intra-Day nomination periods.<sup>71</sup> However, if the generator first waits to see if its bid clears the day-ahead market, it must try and acquire natural gas and transportation during the less liquid Evening or intraday gas transportation nomination cycles. In this event, the generator runs the risk of potentially not being able to find transportation capacity if the pipeline is fully scheduled.

51. We recognize that gas-fired generators face commercial business decisions that inform whether they prefer to bid into the day-ahead electric markets before or after they have secured their gas supply and transportation needs. There are also differences of opinion as to whether electric scheduling should be completed prior to the submission of interstate natural gas pipeline transportation nominations. Some favor having the pipelines' Timely Nomination Cycle clear prior to submission of bids into ISO/RTO

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<sup>71</sup> See, e.g., Equipower Resources Corp. Comments, Docket No. AD12-12-000, at 3-4 (filed Mar. 30, 2012) (a generator that purchases capacity and gas during the timely cycle and is not dispatched "is forced to sell excess volumes or purchase the volume it is short in the intraday market. But the intraday market is highly illiquid and sometimes nonexistent, resulting in the generator (1) being exposed to imbalance penalties on the pipeline if it cannot find a market for excess gas; (2) being unable to operate its generator at expected output; (3) having to purchase additional supplies at a premium; or (4) having to sell excess supply at a discount").

markets, maintaining that gas-fired generators will obtain the most accurate gas prices to inform their energy bids into the organized markets. Others, however, maintain that if electric market schedules clear first, gas-fired generators will know by the Timely Nomination Cycle how much natural gas and interstate natural gas transportation they need to procure and the generators will have less need to obtain transportation and natural gas during less liquid times.

52. Taking these considerations into account, we are proposing that the electric markets clear prior to the pipelines' Timely Nomination Cycle. We conclude that moving the Timely Nomination Cycle later than the current 11:30 a.m. CCT deadline, along with examining whether the ISOs and RTOs should modify their day-ahead market processes, could expand the options available to gas-fired generators. Currently, gas-fired generators in some regions are not provided the opportunity to buy natural gas and arrange natural gas transportation at a time when they know the results of the day-ahead electric market and the natural gas markets are most liquid. Gas-fired generators, therefore, must either procure natural gas supply and transportation prior to knowing whether they were committed or after the close of the Timely Nomination Cycle, when the natural gas supply and transportation markets are less liquid. Under our proposal, gas-fired generators would have the option of arranging natural gas supply and transportation at the Timely Nomination Cycle knowing the results of the day-ahead electric market. In particular, this would forward the objective of minimizing situations

in which gas-fired generators, particularly those that opt to procure natural gas supply and transportation after the day-ahead electric market results are posted, are unable to procure sufficient resources to fulfill their electric market commitments and to contribute to reliable system operation.

53. Furthermore, as discussed above, a gas-fired generator's inability to know whether its bid in the day-ahead market has been selected prior to the deadline for the Timely Nomination Cycle may lead to instances in which gas-fired generators must sell off excess natural gas supply, procure more expensive natural gas supply, de-rate, or burn more expensive fuels. We are concerned that any of these scenarios could result in increased electricity costs and a shift away from the least-cost mix of supply resources as determined by the ISO or RTO's day-ahead dispatch and unit commitment. These circumstances could lead to higher costs being passed on to wholesale customers. On the other hand, if gas-fired generators know whether they were committed in the day-ahead electric market prior to the Timely Nomination Cycle, these generators may have a greater opportunity to procure natural gas transportation in the Timely Nomination Cycle—when there is the greatest opportunity to procure pipeline capacity. This, in turn, could reduce the potential for gas-fired generators to engage in costly actions that raise real-time energy market prices. Thus, electric market outcomes may better reflect expected operating costs if gas-fired generators were provided with day-ahead market results prior to the Timely Nomination Cycle.

54. We understand that moving the Timely Nomination Cycle to later in the day may impose systems and administrative costs on other interstate natural gas pipeline shippers. In balancing all of the interests of the many affected customers, a 1:00 p.m. CCT start time for the Timely Nomination Cycle would appear to provide a reasonable balance of the electric and natural gas industries' concerns: the natural gas industry will have sufficient time to complete the Timely Nomination Cycle during normal business hours, as requested by INGAA and NGSAA, while electric transmission operators will be able to complete their scheduling sufficiently prior to the Timely Nomination Cycle to permit gas-fired generators to acquire natural gas and pipeline capacity during the Timely Nomination Cycle. After considering the potential effects of this proposal, the long-term benefits of ensuring a better coordinated natural gas and electric industry appear to warrant this change. The industries, however, should consider whether a different timeline better fits their combined business needs.

**D. Modified Intra-Day Nomination Timeline**

**1. Background and Comments Received**

55. In addition to the Timely and Evening Nomination Cycles, pipelines currently must offer shippers at least two opportunities to nominate natural gas during the day that gas is flowing. These nomination opportunities are known as the Intra-Day 1 and Intra-Day 2 nomination cycles. The current nomination deadline for Intra-day 1 is 10:00 a.m. CCT on the current Gas Day, with confirmation at 2:00 p.m. CCT, for gas flow at 5:00 p.m. CCT that same Gas Day, and the deadline for Intra-day 2 nominations is 5:00 p.m.

CCT on the current Gas Day with confirmation and flow at 9:00 p.m. CCT that same Gas Day. As with nominations made at the Timely or Evening Cycles, nominations for firm service at the Intra-Day 1 cycle can “bump” an already scheduled interruptible nomination. Pursuant to the “No-Bump Rule,” however, nominations for firm service made at the Intra-Day 2 cycle cannot “bump” scheduled interruptible service.

56. Some pipelines offer additional intraday nomination cycles or other enhanced services.<sup>72</sup> Even if additional nomination cycles are not detailed in the pipeline’s tariff, some pipelines’ tariffs provide that the pipeline will make best efforts to accommodate such incremental nominations throughout the day on a best efforts basis.<sup>73</sup> These enhanced nomination opportunities are not standardized across the nation, however, and therefore are not available to all shippers. Consequently, for gas transactions that require transportation on more than one pipeline, these additional intraday nomination opportunities may have limited value because the pipelines without enhanced nomination opportunities may not confirm the nominations. Thus, if not all pipelines in the nomination chain offer additional nomination opportunities, a shipper transporting gas on

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<sup>72</sup> See, e.g., *Texas Gas Transmission LLC.*, 137 FERC ¶ 61,093 (2011); *Florida Gas Transmission Co., LLC*, 141 FERC ¶ 61,161 (2012) (order accepting pipeline proposal to add an Intra-day 3 Nomination Cycle to accommodate anticipated flow changes for the final six hours of the gas day).

<sup>73</sup> See, e.g., *Tennessee Gas Pipeline Company, LLC’s Tariff*, GT&C Section IV.2(e).

a pipeline that offers such enhanced nominations may not be able to take advantage of that opportunity, and therefore may not be able to schedule its capacity until the next nation-wide nomination cycle.

57. A number of commenters<sup>74</sup> suggested that the standard, nation-wide nomination opportunities that are currently available may not provide gas-fired generators or other shippers with sufficient flexibility to adjust their nominations to respond to real-time changes in their need for natural gas. These commenters requested that additional, standardized intraday nomination opportunities be required on interstate natural gas pipelines.

58. For example, ISO-NE and NYISO suggest that the lack of nomination opportunities impacts their ability to use gas-fired generation capacity to respond to real time events.<sup>75</sup> Specifically, ISO-NE asserts that it is unable to anticipate which or when gas-fired units will be able to respond to real time dispatch requests, and that this uncertainty results in ISO-NE asking multiple units to come online.

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<sup>74</sup> See, e.g., APS Comments, Docket No. AD12-12-000, at 5 (filed Apr. 19, 2013), NYISO Comments, Docket No., AD12-12-000, at 3-2 (filed June 28, 2013) ISO-NE Comments, Docket No. AD12-12-000, at 6 (filed July 5, 2013), Desert Southwest Pipeline Stakeholders Comments, Docket No. AD12-12-000, at 14 (filed Jan. 31, 2014).

<sup>75</sup> ISO-NE Comments, Docket No. AD12-12-000, at 6-7 (filed July 7, 2013), NYISO Comments, Docket No. AD12-12-000, at 3 (filed June 28, 2013).

59. In addition, APS and the Desert Southwest Pipeline Stakeholders<sup>76</sup> (DSPS) argue that gas-fired generators in their region typically hold firm pipeline transportation capacity but cannot make full use of that capacity to respond to a contingency that occurs during or after their peak load period because of a lack of sufficient opportunities to adjust nominations. According to APS and DSPS, the peak demand for electricity in Arizona typically does not occur until approximately 5:00 p.m. Pacific Time, while the only intraday nomination deadlines are 8:00 a.m. Pacific Time (Intra-Day 1) and the no-bump 3:00 p.m. Pacific Time (Intra-Day 2).<sup>77</sup> APS and DSPS maintain that firm shippers should have superior rights to interruptible shippers and should not be limited to bumping interruptible service only at 8:00 a.m. Pacific Time. APS and DSPS notes that they need to use gas-fired generators to balance Variable Energy Resource production in the Southwest. APS and DSPS state that during the extreme summer months when capacity is often constrained, gas-fired electric utilities in the Southwest routinely have to submit their final flow day nomination for their gas requirements 2 to 9 hours before its system hits its peak with 16 to 23 hours remaining in the current Gas Day. Accordingly, APS

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<sup>76</sup> The core members of the DSPS include The Arizona Corporation Commission, Arizona Public Service Company, El Paso Electric Company, New Mexico Gas Company, Inc., Public Service Company of New Mexico, Salt River Project Agricultural Improvement and Power District, Southwest Gas Corporation, and Tucson Electric Power Company/UNS Gas, Inc.

<sup>77</sup> APS Comments, Docket No. AD12-12-000, at 4 (filed Apr. 19, 2013).

suggests that, at a minimum, two additional intraday nomination cycles be added; one bumpable cycle between the current Intra-Day 1 and Intra-Day 2 cycles and another nomination opportunity after Intra-Day 2.<sup>78</sup> NRG also supports the addition of a nomination cycle after Intra-day 2.

60. DSPS also proposes that the current NAESB nomination timeline be modified to add an additional intraday nomination opportunity.<sup>79</sup> DSPS proposes that the Intra-Day 1 cycle would continue to permit bumping and maintain the current nomination deadline of 10:00 a.m. CCT on the current Gas Day, but that Intra-Day 2 would provide an additional bumping opportunity with a nomination deadline of 7:00 p.m. CCT, with confirmation at 9:00 p.m. CCT, for gas flow at 10:00 p.m. on the current Gas Day. DSPS also proposes a no-bump Intra-Day 3 cycle with a nomination deadline of 10:00 p.m. CCT, with confirmation at 1:00 a.m. CCT for gas flow at 1:00 a.m. on the current Gas Day. DSPS asserts that its proposal would provide IT shippers with a final no-bump cycle that guarantees that an IT shipper that is scheduled in Intra-Day 2 cannot be bumped in the final cycle of the current Gas Day and would therefore have a minimum of eleven hours of flow.<sup>80</sup>

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<sup>78</sup> *Id.* at 5-6.

<sup>79</sup> DSPS Comments, Docket No. AD12-12-000, at 28-29 (filed Jan. 31, 2014).

<sup>80</sup> DSPS Comments, Docket No. AD12-12-000, at 29 (filed Jan. 31, 2014).

61. Tennessee Valley Authority (TVA) argues that the Commission's No-Bump Rule creates an artificial barrier to firm service and should be removed.<sup>81</sup> TVA indicated that it has contracted for firm service, including enhanced services for each of its gas-fired generation facilities, but claims those services have limited value when attempting to nominate capacity at an intraday cycle because the No-Bump Rule allows interruptible transmission service to have priority over firm service in the Intra-Day 2 nomination cycle.

62. Several commenters, including INGAA, were open to the creation of additional standard nomination cycles.<sup>82</sup> They noted that, while several pipelines offer services that provide additional flexibility, these services and nomination opportunities are not standardized or available to all shippers. INGAA requests, however, that gas flow for any additional nomination cycles should occur at least eight hours prior to the end of the Gas Day.<sup>83</sup> NGSA commented that it is willing to consider additional intraday

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<sup>81</sup> *See, e.g.*, TVA Response, Docket No. AD12-12-000, at 3-4 (filed July 29, 2013). *See also* APS Comments, Docket No. AD12-12-000, at 7-9 (filed Apr. 19, 2013).

<sup>82</sup> INGAA Comments, Docket No. AD12-12-000, at 5 (filed June 26, 2013).

<sup>83</sup> INGAA Comments, Docket No. AD12-12-000, at 6 & n.6 (filed June 26, 2013) (noting that such timing would be a "natural extension of the current NAESB nomination standards," and reasoning that because the gas flow for the current Intra-Day 1 cycle is one third of the way through the Gas Day, and the gas flow for the Intra-Day 2 cycle is halfway through the Gas Day, that it seems logical for gas flow for a third intraday opportunity to begin two-thirds of the way through the Gas Day).

nomination cycles provided that (1) the No Bump Rule remains intact for any nomination opportunities after the existing Intra-Day 2 cycle; (2) changes in nominations after business hours are voluntary and mutually agreeable to all parties to the transaction; (3) bumped parties are afforded sufficient time between the pipeline's confirmation deadline and the next nomination deadline to secure alternative supply and transportation arrangements; and (4) consideration is given to upstream gas supply limitations and producers' ability to respond to nomination changes.<sup>84</sup> NGSA also states that it supports individual pipeline efforts to offer enhanced nomination cycles beyond the NAESB standardized schedule.

## **2. Commission Proposal**

63. To address concerns that the current standard, nation-wide intraday nomination opportunities do not provide shippers – especially natural gas-fired generators – with sufficient flexibility, the Commission proposes to modify the current natural gas nomination timeline so that in addition to the Timely and Evening nomination cycles, shippers will have four intraday cycles to reschedule gas rather than the existing two. The additional intraday nomination cycles will maximize shippers' ability to make significant changes in their intraday nominations, as well as provide firm shippers an additional, bumpable late-afternoon nomination cycle. These proposed revisions will

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<sup>84</sup> NGSA Comments, Docket No. AD12-12-000, at 7 (filed July 16, 2013).

provide gas-fired generators as well as other pipeline customers with greater flexibility to revise their nominations to adjust to system conditions and changes to load throughout the Gas Day. The last change to the standardized intraday nomination schedule occurred in 1998, in Order No. 587-G, and with the advancements in computer technology over the last 15 years, pipelines today should be able to provide greater nomination flexibility.<sup>85</sup>

64. The timelines we propose below are based on the proposed adoption of 4:00 a.m. CCT as the start of the Gas Day. The proposed intraday nomination schedules seek to preserve a reasonable number of hours between the intraday nomination periods and the end of the Gas Day.<sup>86</sup> This will provide shippers with reasonable opportunities to reschedule gas based on the amount of contract demand or flow remaining.<sup>87</sup> While we propose nomination times below, we continue to recognize that the natural gas and electricity industries are best positioned to work out the details of how changes in

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<sup>85</sup> Order No. 587-G, FERC Stats. & Regs. ¶ 31,062 at 30,672.

<sup>86</sup> The Appendix indicates the number of hours remaining in the Gas Day for each of the proposed intraday nomination opportunities.

<sup>87</sup> As discussed earlier, *supra* at text accompany n.26, intraday nominations are limited by the remainder of a shipper's daily quantity relative to the remaining hours of the Gas Day. Under the current standard nomination timeline, a 4:00 a.m. CCT start of the Gas Day would have meant that shippers could only revise their nomination at Intra-day 1 for an effective flow time of 5:00 p.m. CCT by less than half of their remaining entitlements. Comparatively, under the Commission's proposed nomination timeline, shippers could revise their nomination at Intra-Day 1 for an effective time of 12:00 p.m. CCT for up to 66 percent of their entitlements.

scheduling practices can most efficiently be made and implemented, consistent with the policies discussed here. NAESB may also consider different approaches to providing flexibility.<sup>88</sup> The Commission proposes the following new timeline for intraday nominations:

- Intra-Day 1. To accommodate the proposed move of the start of the Gas Day from 9:00 a.m. CCT to 4:00 a.m. CCT, the proposed Intra-Day 1 cycle would provide an early morning opportunity for shippers to nominate gas with nominations submitted by 8:00 a.m. CCT and an effective time of 12:00 p.m. CCT.
- Intra-Day 2. The proposed Intra-Day 2 cycle would replace the current Intra-Day 1 mid-morning nomination cycle and would permit bumping. We propose to move the current deadline for shippers to submit gas nominations for delivery the same Gas Day from 10:00 a.m. CCT to 10:30 a.m.

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<sup>88</sup> For example, NAESB could consider whether more frequent nominations could be accommodated if all parties in the confirmation chain scheduled electronically.

CCT. In addition, nominations would become effective at 4:00 p.m. CCT, rather than at 5:00 p.m. under the current standards.

- Intra-Day 3. The proposed Intra-Day 3 cycle would provide an additional bumping opportunity for firm shippers, with nominations submitted by 4:00 p.m. CCT, notice to bumped shippers would be provided at 6:00 p.m. CCT, and the nomination would become effective at 7:00 p.m. CCT.
- Intra-Day 4: Intra-Day 4 would replace the current no-bump cycle. We propose to move the current nomination deadline from 5:00 p.m. CCT to 7:00 p.m. CCT, which will provide interruptible shippers bumped during the Intra-Day 3 cycle with one hour to reschedule bumped service. The effective flow time for Intra-Day 4 would be at 9:00 p.m. CCT.<sup>89</sup>

65. The Commission's proposal to modify the current intraday nomination timeline to provide four intraday nomination cycles, instead of the existing two, will create additional national nomination opportunities that would be available to all shippers, not just those shipping on interstate pipelines that voluntarily allow more flexible nomination opportunities. Thus, the proposal would enhance scheduling flexibility for intraday transactions that require transportation on more than one pipeline. Further, the addition

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<sup>89</sup> The Commission at this time is not proposing specific deadlines for upstream and downstream pipelines to confirm the nominations for the revised intra-day timeline, but leaves such determinations to the industry.

of standardized nationwide intraday nomination opportunities should benefit all firm shippers and enhance gas-fired generators' ability to respond to real time events by providing additional opportunities for capacity procurement.

66. The proposed addition of a new Intra-Day 1 early morning cycle is consistent with the proposed change to the start of the Gas Day from 9:00 am CCT to 4:00 am CCT. Currently, gas flow for Intra-Day 1 starts one-third of the way, or eight hours, into the Gas Day.<sup>90</sup> We propose to retain that same time span between the newly proposed start of the Gas Day and the flow of gas for Intra-Day 1 nominations that will flow that same day.

67. We propose to maintain a mid-morning bumpable intraday nomination opportunity for shippers that need to respond to forecasted changes in weather or other events occurring later than the early morning cycle. We propose to move the nomination deadline one half hour later from 10:00 a.m. CCT to 10:30 a.m. CCT and to move the effective or gas flow time one hour earlier from 5:00 p.m. CCT to 4:00 p.m. CCT. The gas flow time for this proposed Intra-Day 2 Cycle will be half way through the proposed 4:00 a.m. to 4:00 a.m. Gas Day, and thus confirmed nominations in our proposed Intra-Day 2 Cycle will flow for 12 hours, as under the existing Intra-Day 2

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<sup>90</sup> INGAA Comments, Docket No. AD12-12-000, at 6 & n.6 (filed June 26, 2013).

Cycle.<sup>91</sup> We are proposing that nominations for this intraday cycle be submitted by 10:30 a.m., in order to give pipelines two and a half hours to confirm those nominations before the 1:00 p.m. deadline for day-ahead nominations to be submitted in the Timely Nomination Cycle.

68. The new proposed late-afternoon Intra-Day 3 cycle that permits bumping will provide firm shippers, including gas-fired generators, with greater ability to use the reserved firm service for which they are paying. Under the Commission's current regulations, pipelines must give scheduling priority to an intraday nomination submitted by a firm shipper over nominated and scheduled volumes for interruptible shippers.<sup>92</sup> The ability of firm shippers to make the most use of the service for which they pay a monthly reservation charge is compromised by their inability to bump interruptible service after the current Intra-Day 1 nomination cycle. Over the last fifteen years, pipelines have increasingly held firm shippers to much stricter tolerances on gas flow, so that firm shippers may need additional intraday nomination opportunities to maintain

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<sup>91</sup> Consistent with INGAA's comments, the Commission proposes to adjust the Intra-Day 1 and Intra-Day 2 nomination cycles so that they remain eight and twelve hours after the start of the proposed gas flow day. *See* INGAA Comments, Docket No. AD12-12-000, at 5 (filed June 26, 2013).

<sup>92</sup> 18 CFR 284.12(b)(1)(i)(A) (2013). Because we are proposing to include in the regulations the standard nomination cycles which specify when interruptible shippers' scheduled quantities can and cannot be reduced, the first sentence of section 284.12(b)(1)(i)(A) to which the text refers is no longer necessary and we propose to remove it.

flow rates.<sup>93</sup> Pipelines also have increasingly held gas-fired generators' natural gas transportation nominations to much stricter tolerances.<sup>94</sup> In light of these changes, the additional bumping nomination opportunity will help gas-fired generators with firm service, and other firm shippers, realign their nominations in accord with weather or other operational changes within the Gas Day. West Coast shippers, in particular, are unable under the current standards to use their firm service to adjust to system conditions and load changes by making an intraday nomination after 8:00 a.m. Pacific Time if such nomination would bump scheduled interruptible service. The proposed new Intra-Day 3 cycle, which is a 4:00 p.m. CCT late-afternoon bump cycle, should provide firm shippers, even those on the West Coast, with sufficient time to react to revised weather forecasts and other demand changes and schedule needed quantities. Under this proposal, pipelines would provide notice of bumping to affected shippers at 6:00 p.m. CCT, and the nominations would become effective at 7:00 p.m. CCT.

69. The proposed Intra-Day 4 cycle will provide interruptible shippers with an opportunity to reschedule bumped volumes after notice of bumping in the new proposed

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<sup>93</sup> See *El Paso Natural Gas Co.*, 114 FERC ¶ 61,305, at P 29 (2006).

<sup>94</sup> See, e.g., *Trailblazer Pipeline Co. LLC*, 143 FERC ¶ 61,084 (2013) (Commission approved enhanced nomination service requiring electronic flow measurement and flow control facilities). See also Texas Gas Transmission Corp., Docket No. CP82-407-000, 2002 Annual Report of Blanket Certificate Activities, <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10463248>.

Intra-Day 3 cycle.<sup>95</sup> The deadline for submitting nominations in the Intra-Day 4 cycle would be at 7:00 p.m. CCT, one hour after notice of bumping in the Intra-Day 3 cycle. As NGSa maintains, and as the Commission has previously recognized, interruptible shippers need some stability in the nomination system. In Order No. 587-G, the Commission accepted a consensus of the gas industry, including both firm and interruptible shippers, and accepted standards that provide that the last intraday nomination opportunity would not permit bumping of interruptible service. In adopting this standard, the Commission recognized that making the last intraday nomination opportunity no-bump would provide stability to the nomination system.<sup>96</sup> We continue to recognize that such stability is needed, and the proposed intraday nomination schedule we outline here is intended to provide a reasonable balance between the interests of firm and interruptible shippers. Maintaining the No-Bump Rule during the proposed Intra-Day 4 cycle will provide such assurances for interruptible shippers, while allowing

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<sup>95</sup> See *Texas Gas Transmission, LLC*, 137 FERC ¶ 61,093 (2011), *order on compliance*, 138 FERC ¶ 61,176 (2012) (*Texas Gas*) (accepting one hour advance notice to bumped interruptible shippers).

<sup>96</sup> *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587-G, (Apr. 23, 1998), FERC Stats. & Regs., Regulations Preambles July 1996 – December 2000 ¶ 31,062 (1998), *order on reh'g*, Order No. 587-I, [63 FR 53565, 53569 \(Oct. 6, 1998\)](#), FERC Stats. & Regs., Regulations Preambles July 1996 – December 2000 ¶ 31,067 (1998).

bumping during the proposed new Intra-Day 3 cycle will permit firm shippers to utilize the higher priority service for which they are paying.

70. In summary, given the proposed 4:00 a.m. start of the Gas Day, our proposed schedule for four intraday nomination opportunities appears to provide a reasonable balance between the interests of firm and interruptible shippers. The 4:00 p.m. CCT late-afternoon bump cycle should provide firm shippers, even those on the West Coast, with sufficient time to react to revised weather forecasts and other demand changes.

Interruptible shippers will be provided with advance notice and an opportunity to reschedule bumped volumes, as is the case under the current standards.<sup>97</sup> However, as indicated above, the industry should consider these proposals and determine if they can reach consensus on revisions that they believe better fit the business practices of the industries.

**E. Clarification Regarding the “No-Bump” Rule for Pipelines with Enhanced Nomination Services**

71. As we have stated before, the NAESB nomination timelines establish only the minimum requirements, and pipelines may propose additional nomination opportunities that better fit their own system needs.<sup>98</sup> Many pipelines have implemented enhanced

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<sup>97</sup> See *Texas Gas*, 138 FERC ¶ 61,176 (accepting one hour advance notice to bumped interruptible shippers).

<sup>98</sup> *Standards for Business Practices for Interstate Natural Gas Pipelines; Standards for Business Practices for Public Utilities*, Order No. 698, FERC Stats.

(continued ...)

nomination services for firm shippers, providing shippers additional nomination opportunities. Some pipelines specifically developed these services to provide gas-fired generation with the ability to effectuate gas deliveries quickly to meet changing demand throughout the Gas Day while managing such things as weather changes and the variable nature of renewable supply sources.<sup>99</sup> Other pipelines provide more than the current four standard nomination times for all shippers.<sup>100</sup>

72. The current NAESB WGQ Standard 1.3.2 provides that bumping is not allowed during the Intraday 2 Nomination Cycle. In *Texas Gas Transmission, LLC*, the Commission accepted an enhanced nomination schedule with eleven additional nominations that permits interruptible shippers to be bumped until the nomination deadline for the Intra-Day 2 cycle (currently 5:00 p.m. CCT), but provided preliminary notice of bumping prior to 5:00 p.m. and permitted any bumped shipper to renominate bumped volumes at the 6:00 p.m. CCT enhanced nomination cycle or any of the subsequent enhanced nomination cycles.<sup>101</sup>

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& Regs. ¶ 31,251, at P 69 (2007).

<sup>99</sup> See *Texas Gas*, 138 FERC ¶ 61,176 at P 4.

<sup>100</sup> See e.g. Texas Eastern Transmission LP Tariff, 4.1, *Scheduling of Storage and Transportation Services, 1.0.0* (flexible intraday nominations), Tennessee Gas Pipeline Tariff, *Fourth Revised Sheet No. 313* (hourly nomination changes).

<sup>101</sup> *Texas Gas*, 137 FERC ¶ 61,093, *order on compliance*, 138 FERC ¶ 61,176; *Gulf South Pipeline Co. LP*, 141 FERC ¶ 61,262 (2012).

73. Participants at the conferences noted that the interaction of these enhanced nomination services with the No-Bump Rule was not clear. We provide clarification below as to how the Commission policy would be implemented under the proposals in this NOPR. Under the current NAESB WGQ standards and the *Texas Gas* policy, pipelines may propose to bump shippers up to 5:00 p.m. CCT as long as they provide notice and renomination opportunities similar to those accepted in *Texas Gas*. Under the revised intraday nomination timelines proposed here, the Commission believes that pipelines offering enhanced nomination services should be permitted to bump interruptible shippers at least until the time when the bumping notice under the newly proposed Intra-Day 3 schedule is provided (in the Commission's proposal 6:00 p.m. CCT). The proposed Intra-Day 4 nomination cycle would guarantee that any bumped interruptible shipper will have an opportunity to renominate its bumped volumes at 7:00 p.m. If a pipeline proposes enhanced nomination services that permit bumping of interruptible services after 6:00 p.m., the Commission will consider the proposal on a case-by-case basis to determine whether such proposal provides an adequate subsequent opportunity to renominate any bumped volumes.

74. In addition, an issue has arisen with respect to the interaction of enhanced nominations and WGQ Standard 1.3.39, which provides that bumping affecting

transactions on pipelines will occur at grid-wide synchronization times only.<sup>102</sup> Some of the pipelines offering enhanced nomination services would have been unable to offer such enhanced nomination services if they could not reduce the gas flow of the bumped interruptible shipper on the same schedule as they increase flow for the firm shippers.<sup>103</sup> These proposals conflicted with Standard 1.3.39 because they would have permitted all interruptible shippers to be bumped at other than grid-wide nomination periods. In these circumstances, the Commission accepted proposals (and granted waivers of Standard 1.3.39) to permit bumping of interruptible shippers at other than grid-wide nomination times when the pipelines have proposed alternative opportunities for interruptible shippers to renominate bumped volumes at the enhanced nomination periods.<sup>104</sup>

75. The Commission finds the continuation of this approach with respect to enhanced nomination proposals by pipelines reasonably balances the interest of firm and interruptible customers by permitting the firm shippers to utilize the rights for which they pay reservation charges and by permitting interruptible shippers to renominate bumped

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<sup>102</sup> Under the current NAESB system, the daily grid-wide synchronization times for scheduled flow are 9:00 a.m. CCT, 5:00 p.m. CCT, and 9:00 p.m. CCT. Standard 1.3.41.

<sup>103</sup> See *Texas Gas*, 137 FERC ¶ 61,093, *order on compliance*, 138 FERC ¶ 61,176; *Gulf South*, 141 FERC ¶ 61,262.

<sup>104</sup> See *ANR Pipeline Co.*, 145 FERC ¶ 61,089 (2013); *Gulf South*, 141 FERC ¶ 61,262 at P 33; *Trans-Union Interstate Pipeline L.P, et al.*, 141 FERC ¶ 61,167, at P 41 (2012) (granting waiver to Texas Gas Transmission LLC).

volumes as quickly as possible. NAESB should consider revisions to Standard 1.3.39 and Standard 1.3.41 to reflect these policies to alleviate the need for pipelines to seek waiver or make other filings regarding Standard 1.3.39.<sup>105</sup>

**F. Multi-Party Transportation Contracts**

76. The Commission is also proposing to revise its regulations to require pipelines to offer multi-party transportation contracts, under which multiple shippers can share interstate natural gas pipeline capacity under a single service agreement. While some pipelines already offer this option, the Commission does not currently require pipelines to do so. Companies have indicated that providing more flexibility to shippers to use their capacity, such as by allowing multiple parties to share transportation service, might permit more efficient and effective use of transportation capacity.

77. The Commission's regulations require that all transfers of firm pipeline capacity from one shipper to another shipper take place pursuant to the capacity release program in section 284.8 of our regulations to assure that such capacity transfers are transparent and not unduly discriminatory.<sup>106</sup> Utilizing capacity release to effectuate sharing of

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<sup>105</sup> Until such changes are adopted by the Commission, pipelines intending that firm shippers be able to bump interruptible service during enhanced nomination periods must include in their tariff filings a revision to their incorporation by reference of the NAESB standards indicating that this standard is not incorporated.

<sup>106</sup> See *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation and Regulation of Natural Gas Pipeline After Partial Wellhead Decontrol*, Order No. 636, FERC Stats. & Regs. ¶ 30,939, at 30,416-20, order

(continued ...)

capacity between entities makes sharing of capacity less efficient due to the need to comply with the capacity release posting and bidding requirements as well as the need for the replacement shipper to enter into a contract with the pipeline for each release. In recent years, however, the Commission has accepted several pipeline proposals to offer multiple shippers the option of entering into a single contract for transportation service, with a single agent or asset manager managing the capacity under the contract.<sup>107</sup> As approved by the Commission, this option permits several shippers to share the subject capacity without the need to use the capacity release program to transfer the capacity among themselves. In order to satisfy the Commission's shipper-must-have-title policy, the pipelines proposed, and the Commission accepted, tariff provisions ensuring that each

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*on reh'g*, Order No. 636-A, FERC Stats. & Regs. ¶ 30,950, at 30,554 (1992). *See also Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, FERC Stats. & Regs. ¶ 31,091, at 31,300 (2000).

<sup>107</sup> *Southern Natural Gas Co.*, 124 FERC ¶ 61,145 (2008) (pipeline modified Rate Schedule FT to allow a single contract option for multiple shippers affiliated with a single agent or asset manager); *Florida Gas Transmission Co., LLC*, 128 FERC ¶ 61,284 (2009), *order on compliance filing*, Docket No. RP09-922-001 (Nov. 17, 2009) (delegated letter order) (pipeline modified provisions of Rate Schedules FT and IT to allow a single contract option for multiple shippers that have designated a single agent on their behalf); *Transcontinental Gas Pipe Line Corp.*, Docket No. RP10-1099-000 (Sept. 14, 2010) (delegated letter order) (pipeline modified provisions of Rate Schedules IT, PAL and Pooling, and ICTS to allow a single contract option for multiple shippers that have designated a single agent on their behalf); *Tennessee Gas Pipeline Co., L.L.C.*, 142 FERC ¶ 61,200 (2013) (pipeline modified provisions of Rate Schedules FT, IT and PAL to allow a single contract option for multiple shippers that have designated a single agent on their behalf).

shipper under a multi-party service agreement agree to be jointly and severally liable for all obligations of all shippers and the agent under the single service agreement.<sup>108</sup> The Commission has permitted multi-party transactions even when the shippers under such an agreement are not affiliated with one another.<sup>109</sup>

78. This contracting flexibility has been utilized by entities to meet their collective load obligations in a more efficient manner. For example, certain affiliated utilities of Southern Company, which have long operated as an integrated public utility electric system through the joint commitment and economic dispatch of their gas-fired generating resources, have entered into a single interstate natural gas pipeline transportation service agreement, with Southern Company Services (their affiliated agent) arranging for the gas supplies used in their generating facilities.<sup>110</sup> Under this single transportation service agreement, on any given day Southern Company Services can use up to its overall

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<sup>108</sup> See, e.g., *Southern*, 124 FERC ¶ 61,145 at P 12. As the Commission explained, multi-party agreements must include joint and several liability to comply with the Commission's shipper-must-have-title policy. Without joint and several liability, shippers under the multi-party agreement that are not liable for the total charges under the agreement would be in violation of the Commission's shipper-must-have-title policy to the extent they used capacity in excess of that for which they were liable to pay.

<sup>109</sup> See, e.g., *Florida Gas Transmission Co., LLC*, 126 FERC ¶ 61,055 (2009).

<sup>110</sup> See, e.g., *Southern Natural Gas Co.*, Transmittal, Docket No. RP01-205-016 (May 14, 2009); *Southern*, 124 FERC ¶ 61,145. The affiliates were Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company, Savannah Electric and Power Company and Southern Power Company.

contractual entitlement under the service agreement to provide service to any one of its affiliated utilities.

79. The use of shared capacity can make the purchase of firm pipeline capacity more affordable, including for gas-fired generators. For example, a gas-fired generator could decide to defray its pipeline capacity costs by sharing capacity among a number of generators or by sharing capacity with a LDC that has differing peak needs for natural gas transportation service. Similarly, an industrial plant, which has a relatively constant need for gas when its plant is operating but which has the flexibility to reduce its operations and gas usage on relatively short notice, could arrange to share its capacity with another shipper, such as a gas-fired generator, which only needs gas during short intervals and which has less control over when it runs. Permitting such entities to enter into a single contract with the pipeline gives those entities the flexibility to choose contracting partners with complementary needs for pipeline capacity and to enter into an ongoing contractual relationship concerning how they will share the capacity.

80. In order to provide this contracting flexibility to shippers on all interstate pipelines, the Commission proposes to revise Part 284 of its regulations to require interstate natural gas pipelines that offer firm transportation service under subpart B or G of Part 284 to allow multiple shippers associated with a designated agent or asset manager to be jointly and severally liable under a single firm transportation service agreement, subject to reasonable terms and conditions. Consistent with the multi-party

contract tariff provisions the Commission has previously approved, such reasonable terms and conditions may include requirements that (1) the shippers and agent demonstrate their agency relationship in writing and (2) the shippers are willing to be treated collectively as one shipper for nomination, allocation, and billing purposes under the contract.

81. The Commission proposes only to require pipelines to offer multi-party service agreements for firm service, because a primary benefit of such service agreements is the fact they permit parties to share firm capacity without the need to engage in capacity releases. However, we recognize that some pipelines currently offer multi-party service agreements to interruptible, as well as firm customers. The Commission requests comment on whether the Commission should require pipelines to offer multi-party service agreements for interruptible transportation service.

### **III. Notice of Use of Voluntary Consensus Standards**

82. 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 proposing to use a government-unique standard in lieu of a voluntary consensus standard, provide a statement which identifies such standards and provides a preliminary explanation for the proposed use of a government-unique standard in lieu of a voluntary consensus standard. While the Commission previously has adopted NAESB standards regarding natural gas and electric utility scheduling, NAESB has thus far been unable to reach consensus on standards coordinating the scheduling between these two industries

because these issues involve policy questions more appropriate for resolution by the Commission.<sup>111</sup> In this NOPR, the Commission is proposing, and seeking comment on whether, revisions to the NAESB standards are necessary to provide more efficient coordination between the two industries to reduce costs and to promote the provision of reliable service. However, the Commission is providing NAESB an opportunity, as it has in the past, to consider these policy goals and develop consensus standards that may better fit the business practices of the two industries.

#### **IV. Information Collection Statement**

83. The following collections of information contained in this proposed rule are being submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the Paperwork Reduction Act of 1995, 44 U.S.C. 3507(d). The Commission solicits comments on the Commission's 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. The burden estimates are for one-time implementation of the

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<sup>111</sup> North American Energy Standards Board, *Gas-Electric Harmonization Committee Report*, at 4 (September 2012) (“although this Committee has identified discrete areas where standards could be considered, the Committee recognizes that the ability of NAESB to reach consensus on certain standards may not be possible absent further policy guidance by regulators or other appropriate public bodies”).

information collection requirements of this NOPR (including tariff filing, documentation of the process and procedures, and IT work), and ongoing burden.

84. The collections of information related to this NOPR fall under FERC-545 (Gas Pipeline Rates: Rate Change (Non-Formal))<sup>112</sup> and FERC-549C (Standards for Business Practices of Interstate Natural Gas Pipelines).<sup>113</sup> The following estimates of reporting burden are related only to this NOPR and anticipate the costs to pipelines for compliance with the Commission's proposals to (1) move the start of the Natural Gas Operating Day earlier than the current 9:00 a.m. CCT, (2) start the first day-ahead gas nomination opportunity (Timely Nomination Cycle) later than 11:30 a.m. CCT, (3) add additional intraday nominations, and (4) allow multiple shippers to share pipeline capacity under a single firm transportation service agreement. The burden estimates are for one-time tariff filing, implementation, and on-going costs.

Public Reporting Burden:

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<sup>112</sup> FERC-545 covers rate change filings made by natural gas pipelines, including tariff changes.

<sup>113</sup> FERC-549C covers Standards for Business Practices of Interstate Natural Gas Pipelines.

<b>NOPR in RM14-2</b>					
	<b>Number of Respondents<sup>114</sup></b> (1)	<b>Number of Responses per Respondent</b> (2)	<b>Average Burden Hours Per Response</b> (3)	<b>Total Annual Burden Hours</b> (1)x(2)x(3)	<b>Total Annual Cost (\$)<sup>115</sup></b>
<b>FERC-545 (OMB Control No. 1902-0154)</b>					
Tariff Filing (one-time) <sup>116</sup>	166	1	10	1,660	\$138,892
<b>FERC-549C (OMB Control No. 1902-0174)</b>					

<sup>114</sup> An estimated 166 natural gas pipelines (Part 284 program) are affected by this NOPR. Although some natural gas pipeline companies may utilize business practices that satisfy parts of the proposals in this NOPR (e.g., provide additional nomination opportunities), the full cost of industry compliance is estimated for the total number of approximately 166 potential respondents.

<sup>115</sup> Wage data is based on the Bureau of Labor Statistics data for 2012 (“May 2012 National Industry-Specific Occupational Employment and Wage Estimates, [for] Sector 22 - Utilities” at [http://bls.gov/oes/current/naics2\\_22.htm](http://bls.gov/oes/current/naics2_22.htm)) and is compiled for the top 10 percent earned. For the estimate of the benefits component, *see* <http://www.bls.gov/news.release/ecec.nr0.htm>.

<sup>116</sup> The mean hourly cost of tariff filings and implementation for interstate natural gas pipelines is \$83.67. This represents the average composite wage (salary and benefits for 2,080 annual work-hours) of the following occupational categories: “Legal” (\$128.02 per hour), “Computer Analyst” (\$83.50 per hour), and “Office and Administrative” (\$39.49 per hour). Wage data is available from the Bureau of Labor Statistics at [http://bls.gov/oes/current/naics2\\_22.htm](http://bls.gov/oes/current/naics2_22.htm) and is compiled for the top 10 percent earned. For the estimate of the benefits component, *see* <http://www.bls.gov/news.release/ecec.nr0.htm>.

Implementatio n of proposed business standards, including process, procedures, and IT support (one-time) <sup>117</sup>	166	1	240	39,840	\$3,071,664
Annual operations, including 2 additional intraday nominations (ongoing) <sup>118</sup>	166	1	365	60,590	\$4,268,566
<b>Total one- time (for FERC-545 and FERC- 549C)</b>				41,500	\$3,210,556
<b>Total ongoing (for FERC- 549C)</b>				60,590	\$4,268,566

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<sup>117</sup> The average hourly cost is \$77.10. This represents the average composite wage (salary and benefits for 2,080 annual work-hours) of the following occupational categories: “Legal” (\$128.02 per hour), “Computer Analyst” (\$83.50 per hour), “Gas Plant Operator” (\$57.40) and “Office and Administrative” (\$39.49 per hour).

<sup>118</sup> For ongoing operations, we estimate 1 hour per calendar day per respondent (or 365 hours annually per respondent). The average hourly cost is \$70.45. This represents the average composite wage (salary and benefits for 2,080 annual work-hours) of the following occupational categories: “Computer Analyst” (\$83.50 per hour), and “Gas Plant Operator” (\$57.40).

Information Collection Costs: The Commission seeks comments on the costs to comply with these requirements. We estimate the total costs for all respondents to be:

- Year 1 (including the one-time tariff-filing, and implementation and ongoing costs ): \$7,479,122
- Years 2 and 3, each (ongoing costs only): \$4,268,566

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

Action: Proposed revisions to information collections.

OMB Control Nos.: 1902-0154 and 1902-0174.

Respondents: Business or other for profit enterprise (Natural Gas Pipelines).

Frequency of Responses: One-time filing and implementation and ongoing.

Necessity of Information: The proposals in this NOPR would, if implemented, upgrade the industry's current business practices by specifically: (1) creating or revising standards to start the natural gas operating day earlier than the current 9:00 a.m. CCT; (2) creating or revising standards to delay the start of the first day-ahead gas nomination opportunity for pipeline scheduling until after 11:30 a.m. CCT; (3) creating or revising standards to add two additional intraday nomination cycles in the afternoon and evening, and (4) allow multiple shippers to share pipeline capacity under a single firm transportation service agreement.

The implementation of these standards and regulations will promote additional efficiency and reliability of the gas industry's operations.

Internal Review: The Commission has reviewed the requirements pertaining to business practices of natural gas pipelines and made a preliminary determination that the proposed revisions are necessary to establish more efficient coordination between the natural gas and electric industries. Requiring such information ensures common business practices for participants engaged in the sale of electric energy at wholesale and the transportation of natural gas. These requirements conform to the Commission's plan for efficient information collection, communication, and management within the natural gas pipeline industry. The Commission has assured itself, by means of its internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

85. 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](mailto:DataClearance@ferc.gov), phone: (202) 502-8663, fax: (202) 273-0873].

86. Comments concerning the collections of information and the associated burden estimates, should be sent to the Commission 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) 395-4638, fax: (202) 395-4718]. For security reasons, comments to OMB should be submitted by e-mail to: [oira\\_submission@omb.eop.gov](mailto:oira_submission@omb.eop.gov). Comments submitted to

OMB should include Docket Number RM14-2-000 and OMB Control Numbers 1902-0154 and 1902-0174.

**V. Environmental Analysis**

87. 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.<sup>119</sup> [Insert whether the action has been categorically excluded from EA/EIS, 18 CFR § 380.4 or if the Commission has done an EA/EIS, explain findings.]

**VI. Regulatory Flexibility Certification**

88. The Regulatory Flexibility Act of 1980 (RFA)<sup>120</sup> generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a rule and that minimize any significant economic impact on a substantial number of small entities. The Small Business Administration's (SBA) Office of Size Standards develops the numerical definition of a small business as

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<sup>119</sup> *Regulations Implementing the National Environmental Policy Act*, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs., Regulations Preambles 1986-1990 ¶ 30,783 (1987).

<sup>120</sup> 5 U.S.C. 601-612.

matched to North American Industry Classification System Codes (NAICS).<sup>121</sup> The SBA has established a size standard for pipelines transporting natural gas, stating that a firm is a small entity if its annual receipts are less than \$25.5 million.<sup>122</sup>

Approximately 166 interstate pipeline entities are potential respondents subject to the NOPR reporting requirements. For the year 2012, eleven companies unaffiliated with larger companies had annual revenues of less than \$25.5 million (7 percent of 166 potential respondents) and are defined by the SBA as “small entities.” The Commission anticipates that the estimated compliance cost of the proposals in this NOPR is \$7,479,122 (or \$45,055 per entity) in Year 1 (one-time and ongoing costs), and \$4,268,566 (or \$25,714 per entity) in Years 2 and 3 (ongoing cost), regardless of entity size. The Commission does not consider the estimated impact per company to be significant. 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.

89. Accordingly, pursuant to § 605(b) of the RFA,<sup>123</sup> the regulations proposed herein should not have a significant economic impact on a substantial number of small entities.

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<sup>121</sup> 13 CFR 121.101.

<sup>122</sup> 13 CFR 121.201, subsection 486.

<sup>123</sup> 5 U.S.C. 605(b).

## VII. Comment Procedures

90. The Commission invites 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 240 days after publication in the *FEDERAL REGISTER*]**. As noted above, on this date commenters should submit comments on any consensus proposals that may result from the 180-day period provided to the industries to address these matters and issues through NAESB, as well as comments on the Commission's proposals. Comments must refer to Docket No. RM14-2-000, and must include the commenter's name, the organization they represent, if applicable, and their address in their comments.

91. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts 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.

92. Commenters that are not able to file comments electronically must send an original of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.

93. 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.

### **VIII. Document Availability**

94. In addition to publishing the full text of this document in the *Federal Register*, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington DC 20426.

95. 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.

96. User assistance is available for eLibrary and the Commission's website 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](mailto: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](mailto:public.referenceroom@ferc.gov).

List of Subjects in 18 CFR Part 284

Natural gas  
Reporting and recordkeeping requirements

By direction of the Commission. Commissioner Clark is dissenting with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

In consideration of the foregoing, the Commission proposes 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:

**Authority:** 15 U.S.C. 717-717z, 3301-3432; 42 U.S.C. 7101-7352; 43 U.S.C. 1331-1356.

2. In § 284.12, paragraph (a)(1)(ii) is revised to read as follows:

(a) \*\*\*

(1) \*\*\*

(ii) Nominations Related Standards (Version 2.0, November 30, 2010, with Minor Corrections Applied Through December 2, 2011), with the exception of Standards 1.3.1, 1.3.2, and 1.3.41;

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3. In § 284.12, revise paragraph (b)(1)(i), redesignate paragraph (b)(1)(ii) as paragraph (b)(1)(iv) and add new paragraphs (b)(1)(ii), (b)(1)(iii), and b(1)(v) to read as follows:

(b) \*\*\*

(1) \*\*\*

(i) Standard time for the gas day should be 4 a.m. to 4 a.m. (central clock time or CCT).

(ii) A pipeline must support the following standard nomination cycles (all times are central clock time):

(A) Timely Nomination Cycle. The deadline for shippers to submit gas nominations to a pipeline for delivery the next gas day is 1:00 p.m.; the pipeline must

provide notice to shippers of scheduled quantities by 4:30 p.m.; and scheduled quantities for the Timely Nomination Cycle shall be effective for flow at 4:00 a.m. on the next gas day.

(B) Evening Nomination Cycle. The deadline for shippers to submit gas nominations to a pipeline for delivery the next gas day is 6:00 p.m.; the pipeline must provide notice to shippers of scheduled quantities and provide notice to interruptible shippers whose scheduled quantities will be reduced by an Evening Nomination by a firm shipper by 10:00 p.m.; and scheduled quantities for the Evening Nomination Cycle shall be effective for flow at 4:00 a.m. on the next gas day.

(C) Intraday 1. The deadline for shippers to submit gas nominations to a pipeline for delivery the same gas day is 8:00 a.m.; the pipeline must provide notice to shippers of scheduled quantities and provide notice to interruptible shippers whose scheduled quantities will be reduced by an Intraday 1 Nomination by a firm shipper by 11:00 a.m.; and scheduled quantities for the Intraday 1 Nomination Cycle shall become effective for flow at 12:00 p.m. the same gas day.

(D) Intraday 2. The deadline for shippers to submit gas nominations to a pipeline for delivery the same gas day is 10:30 a.m.; the pipeline must provide notice to shippers of scheduled quantities and provide notice to interruptible shippers whose scheduled quantities will be reduced by an Intraday 2 Nomination by a firm shipper by 2:00 p.m.; and scheduled quantities for the Intraday 2 Nomination Cycle shall become effective for flow at 4:00 p.m. the same gas day.

(E) Intraday 3. The deadline for shippers to submit gas nominations to a pipeline for delivery the same gas day is 4:00 p.m.; the pipeline must provide notice to shippers of scheduled quantities and provide notice to interruptible shippers whose scheduled quantities will be reduced by an Intraday 3 Nomination by a firm shipper by 6:00 p.m.; and scheduled quantities for the Intraday 3 Nomination Cycle shall become effective for flow at 7:00 p.m. the same gas day.

(F) Intraday 4. The deadline for shippers to submit gas nominations to a pipeline for delivery the same gas day is 7:00 p.m.; the pipeline must provide notice to shippers of scheduled quantities by 9:00 p.m.; and scheduled quantities for the Intraday 4 Nomination Cycle shall become effective for flow at 9:00 p.m. the same gas day. An interruptible shipper's scheduled quantities cannot be reduced as a result of an Intraday 4 Nomination by a firm shipper.

(iii) When an interruptible shipper's scheduled volumes are to be reduced as a

result of an intraday nomination by a firm shipper, the interruptible shipper must be provided with advance notice of such reduction and must be notified whether penalties will apply on the day its volumes are reduced.

(iv) \*\*\*

(v) A pipeline must allow multiple shippers associated with a designated agent or asset manager to be jointly and severally liable under a single firm transportation service agreement, subject to reasonable terms and conditions.

\* \* \* \* \*

**Note: The following appendix will not appear in the Code of Federal Regulations**

**APPENDIX.**

<u>Nomination Cycle</u>	<u>Nomination Deadline (CCT)</u>	<u>Notification of Schedule</u>	<u>Nomination Effective (CCT)</u>	<u>Bumping of IT</u>	<u>Hours Until End of Gas Day</u>	<u>Maximum % Change in Nomination</u>
Timely	1:00 p.m.	4:30 p.m.	4:00 a.m. Next Day	N/A	24	100%
Evening	6:00 p.m.	10:00 p.m.	4:00 a.m. Next Day	Yes	24	100%
Intra-Day 1	8:00 a.m.	11:00 a.m.	12:00 p.m. Current Day	Yes	16	~66%
Intra-Day 2	10:30 a.m.	2:00 p.m.	4:00 p.m. Current Day	Yes	12	50%
Intra-Day 3	4:00 p.m.	6:00 p.m.	7:00 p.m. Current Day	Yes	9	37.5%
Intra-Day 4	7:00 p.m.	9:00 p.m.	9:00 p.m. Current Day	No	7	~29.2%

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Coordination of the Scheduling Processes of Interstate  
Natural Gas Pipelines and Public Utilities

Docket No. RM14-2-000

(Issued March 20, 2014)

CLARK, Commissioner, *dissenting*:

My dissent from today's order stems from factors related to both its timing and its process going forward.

For the past several months, a number of groups have been organizing efforts to develop a framework that might ultimately lead to a gas-electric industry consensus proposal. While the success of these efforts is no sure thing, I would have preferred that we give industry more time. A firm deadline of perhaps another 3-4 months should have been sufficient to determine whether these efforts stood any chance of success. The downside risk of giving these groups more time seems small considering that the timeline envisioned in this order still puts the proposed solutions in place after next winter. Even if industry-led efforts failed, the Commission would still have had enough time to put forward a proposal similar to this in time for the winter of 2015-16. I fear that by releasing this NOPR now, we are doing a disservice to those involved in industry-led efforts, by giving them just enough time to get started, but also ensuring they do not have enough time to complete their work. In retrospect, if the Commission was not fully supportive of giving these groups until the middle of this year to complete discussions, we should have saved everyone the hassle and simply issued a NOPR months ago.

My second concern is related to a concurrent NAESB process the Commission proposes simultaneous to this NOPR. As a consensus-driven organization, NAESB is dependent on all parties having a reason to negotiate and compromise upon sometimes difficult technical issues in which there are vested interests. I worry this effort may be less-than-fruitful now that the Commission has already set out its marker and put its thumb on the scale. Parties that might have had an interest in negotiating in good faith may see little reason to do so if they feel like they will ultimately get from this Commission most of what they wanted in the first place. We have effectively short-circuited any chance for industry to collaborate or compromise in the spirit of true negotiation, perhaps consigning the NAESB process to the same fate we have now given to other consensus-driven efforts.

For these reasons, I respectfully dissent.

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Tony Clark  
Commissioner