Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities; Final Rule
DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 284

[Docket No. RM14–2–000; Order No. 809]

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

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final rule.

SUMMARY: In this Final Rule, the Federal Energy Regulatory Commission (Commission) is revising its regulations to better coordinate the scheduling of wholesale natural gas and electricity markets in light of increased reliance on natural gas for electric generation, as well as to provide additional scheduling flexibility to all shippers on interstate natural gas pipelines. The revised regulations in this Final Rule modify the scheduling practices used by interstate pipelines to schedule natural gas transportation service and provide additional contracting flexibility to firm natural gas transportation customers through the use of multi-party transportation contracts. The revisions in this Final Rule, together with the Commission's action in certain related proceedings, will better ensure the reliable and efficient operation of both the interstate natural gas pipeline and electricity systems.

DATES: This rule will become effective July 8, 2015. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of July 8, 2015.


SUPPLEMENTARY INFORMATION:

ORDER NO. 809

FINAL RULE

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1. In this Final Rule, the Federal Energy Regulatory Commission (Commission) revises Part 284 of the Commission’s regulations relating to the scheduling of transportation service on interstate natural gas pipelines to better coordinate the scheduling practices of the wholesale natural gas and electric industries, as well as to provide additional scheduling flexibility to all shippers on interstate natural gas pipelines. The Final Rule changes the nationwide Timely Nomination Cycle nomination deadline for scheduling transportation service from 11:30 a.m. Central Clock Time (CCT) to 1:00 p.m. CCT and revises the intraday nomination timeline, to include adding an additional intraday scheduling opportunity during the gas operating day (Gas Day). The Final Rule effectuates these changes by incorporating by reference into the Commission’s regulations the standards developed and filed by the North American Energy Standards Board (NAESB).1 The revised regulations in this Final Rule also provide additional contracting flexibility to firm natural gas transportation customers through the use of multi-party transportation contracts.

2. On March 20, 2014, the Commission instituted proceedings under section 206 of the Federal Power Act (FPA)2 to ensure that each ISO and RTO is ultimately adopted by the Commission to coordinate its day-ahead market with the changes adopted herein or to show cause why its existing scheduling practices need not be changed. This Final Rule—together with actions already undertaken by the Commission in other dockets as discussed below, additional regional efforts underway by market participants and stakeholders, and any actions taken in the section 206 proceeding on ISO and RTO scheduling practices—is designed to better ensure the reliable and efficient operation of both the interstate natural gas pipeline and electricity systems.

3. However, for the reasons described below, the Commission declines to adopt the proposal to change the start of the Gas Day. It is not clear that requiring a change in the Gas Day start time would provide sufficient benefits to outweigh the operational and safety impacts and costs of making such a change. While the Commission declines to take action in this proceeding to change the start of the Gas Day on a nation-wide basis, we note that since the issuance of the NOPR in March 2014 both ISO–NE and PJM (the two regions that appear to be of the most concern) have recently undertaken operational and market actions to address the availability and performance of generators, including gas-fired generators, in their footprints. These and other regional efforts to address generator performance may result in natural gas-fired generators and other market participants in these regions taking actions to alleviate some of the electric industry fuel supply concerns underlying the Gas Day proposal in the NOPR.

I. Background

4. The Commission’s existing regulations incorporate by reference the interstate natural gas pipeline scheduling business practice standards of NAESB’s Wholesale Gas Quadrant (WQ).3 NAESB is a consensus standards organization composed of representatives of all segments of the natural gas industry and the electric power industry. Since 1996, these standards have established nationwide timelines that the industry and the Commission have determined are necessary to establish a more efficient and integrated pipeline grid.

5. The existing 24-hour operating day, or Gas Day, for interstate natural gas pipelines begins at 9:00 a.m. CCT and ends at 9:00 a.m. CCT the following day. All nominations for interstate natural gas pipeline transportation service are for a daily quantity to be transported over the 24-hour Gas Day.4 The rate at which a shipper may use its contracted quantity on a given interstate pipeline, also known as a flow rate, is determined by the individual pipeline’s tariff and the flexibility of that pipeline to permit shippers to use gas on other than a uniform hourly basis over the 24-hour Gas Day (i.e., non-ratable flows). Except for special services, pipeline services are generally based on the assumption of uniform hourly flows over the Gas Day.5

6. 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 Table 1 below, shippers have two nomination opportunities prior to the day of gas flow, the Timely Nomination Cycle and the Evening Nomination Cycle, and two opportunities to revise their nominations on the day of gas flow (Intraday 1 and Intraday 2). Individual pipelines may offer additional scheduling opportunities beyond the standard nomination cycles.6

<table>
<thead>
<tr>
<th>Nomination cycle</th>
<th>Nomination effective (CCT)</th>
<th>Notification of schedule (CCT)</th>
<th>Nomination deadline (CCT)</th>
<th>Bumping of IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely</td>
<td>9:00 a.m. Next Day</td>
<td>4:30 p.m.</td>
<td>11:30 a.m.</td>
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<tr>
<td>Evening</td>
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<td>10:00 p.m.</td>
<td>6:00 p.m.</td>
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<tr>
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<td>2:00 p.m.</td>
<td>10:00 a.m.</td>
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</tr>
<tr>
<td>Intraday 2</td>
<td>9:00 p.m. Current Day</td>
<td>9:00 a.m.</td>
<td>5:00 p.m.</td>
<td>No</td>
</tr>
</tbody>
</table>

1 NAESB is accredited by the American National Standards Institute (ANSI) as an accredited standards organization. NAESB complies with ANSI’s requirements that its procedures are open to materially affected entities and that the standards represent a reasonable consensus of the industry without domination by any single interest or interest category.


3 See 18 CFR 284.12(a) and (b) [2014].

4 The NAESB WGQ standards refer to CCT which refers to the actual time in the Central Time Zone, reflecting Central Standard Time or Daylight Savings Time, whichever is applicable.

5 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 pipeline may announce a critical notice period, where shippers are expected to stay in balance. Some pipelines also offer enhanced services that permit subscribing shippers more variable hourly flow rates.

6 See, e.g., Texas Gas Transmission LLC, 137 FERC ¶ 61,093 (2011), order on compliance, 138 FERC ¶ 61,176 [2013] (Texas Gas); and Gulf South Pipeline Company LP, 141 FERC ¶ 61,262 [2012] (Gulf South).
7. With respect to electric industry scheduling practices, the Commission has accepted regional variation in the development of scheduling practices in ISO and RTO electric markets, each of which has established its own scheduling timelines. For most electric utilities, the 24-hour operating day begins at 12:00 a.m. local time. The ISOs and RTOs’ practice of scheduling resources generally includes the commitment and dispatch of sufficient, deliverable generation to supply load in a reliable least cost manner, with all based on generator availability and the transmission facilities that will be in service that day. To perform the unit commitment and dispatch processes, ISOs and RTOs have developed and implemented scheduling practices for day-ahead and real-time periods. These include: 7

8. 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. 8

9. Recent developments in the wholesale natural gas and electricity industries—particularly the organized electricity markets—signal that changes to the gas nomination schedule may be needed. 9 Reliance on natural gas as a fuel for electric generation has steadily increased in recent years. 10 This trend is expected to continue, resulting in greater interdependence between the natural gas and electric industries. 11 Several events over the last few years, such as the Southwest Cold Weather Event 12 and the extreme and sustained cold weather events in the eastern U.S. in January 2014, 13 show the crucial interrelationship between natural gas pipelines and electric transmission operators and underscore the need for improvements in the coordination of wholesale natural gas and electric markets.

10. Since early 2012, the Commission has conducted multiple technical conferences and requested comment on various aspects of gas-electric interdependence and coordination in order to better understand the interface between the electric and natural gas pipeline industries and identify areas for improved coordination. 14 In a report issued on November 15, 2012, Commission staff noted that natural gas

and electric industry participants highlighted the need for greater alignment of natural gas and electric scheduling practices. 15 At the direction of the Commission, staff conducted an additional technical conference in April 2013 to specifically discuss natural gas and electric scheduling practices, including whether and how natural gas and electric industry scheduling practices could be harmonized in order to achieve more efficient scheduling practices for both industries. 16

11. At the April 2013 conference, participants identified several areas in which the differences between the nationwide natural gas schedule and the regional electric schedules can affect the provision of reliable service and may create inefficiencies in scheduling that result in less cost effective use of resources. The participants identified three major issues. These included: (1) The difference between the standardized operating day of interstate natural gas pipelines and the operating days of electric utilities (including ISOs and RTOs); (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 in the ISOs and RTOs; and (3) the lack of intraday nomination opportunities on interstate natural gas pipelines, which limits the ability of gas-fired electric generators, as well as other shippers, to revise their nominations during the operating day. Several conference participants stressed that, due to the difficult policy questions involved, they would need Commission policy guidance before they would be able to move forward on coordination of the natural gas and electric industries existing scheduling practices.

A. Notice of Proposed Rulemaking

12. Based on the increased reliance on 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 concluded that the concerns identified by the industries warranted further action. On March 20, 2014, the Commission issued the Notice of Proposed Rulemaking (NPR or Proposed Rule) to address concerns

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8 OATT section 13.6. 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 section 14.6.
13 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/Calendars/20140116103006-A-4-Presentation.pdf.
with divergent interstate natural gas pipeline and wholesale 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.17

13. The NOPR proposed three changes to the nationwide natural gas scheduling practices: (1) Move the start of the Gas Day from 9:00 a.m. CCT to 4:00 a.m. CCT; (2) move the start of the first-day-ahead gas nomination opportunity for pipeline scheduling (Timely Nomination Cycle) from the current 11:30 a.m. CCT to 1:00 p.m. CCT;18 and (3) modify the current intraday nomination timeline to provide four intraday nomination cycles, instead of the existing two, to provide greater flexibility to all pipeline shippers.19

14. The NOPR also proposed to require interstate natural gas pipelines to offer multi-party transportation contracts to provide multiple shippers the flexibility to share interstate pipeline capacity to serve complementary needs in an efficient manner, and the NOPR provided clarification of the Commission’s no-bump policy with respect to any enhanced nomination opportunity proposed by a pipeline (beyond the standard nomination opportunities).

15. Recognizing that the natural gas and electricity industries were best positioned to work out the details of how changes in scheduling practices could most efficiently be made and implemented, the Commission provided the natural gas and electric industries, through NAESB, with a period of 180 days after publication of the NOPR in the Federal Register to reach consensus on any revisions to the Commission’s proposals regarding the Gas Day and pipeline nomination timeline and either file consensus standards with the Commission or notify the Commission of the natural gas and electric industries’ inability to reach consensus on any revisions to the Commission’s proposals. Comments on NAESB’s consensus standards, as well as comments on the Commission’s proposals, were to be filed 240 days after publication of the NOPR in the Federal Register, or November 28, 2014. In the NOPR, the Commission stated that if the Commission were to adopt regulations that have not been approved by NAESB, it would 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.

16. On the same day the NOPR was issued, the Commission issued two other orders, which, in conjunction with the NOPR, were designed to ensure the reliable and efficient operation of both the interstate natural gas pipeline and electricity systems. In one order, the Commission instituted proceedings under section 206 of the Federal Power Act (FPA)20 to ensure that each ISO’s and RTO’s scheduling practices, particularly its day-ahead scheduling practices, correlate with any revisions to the natural gas scheduling practices ultimately adopted by the Commission in the instant proceeding. In the Section 206 Order, the Commission required each ISO and RTO within ninety days of the publication of a Final Rule in this proceeding to: (1) Make a filing that proposes tariff changes to adjust the time at which the results of its day-ahead energy market and reliability unit commitment process (or equivalent) are posted to a time that is sufficiently in advance of the Timely and Evening Nomination Cycles, respectively, to allow gas-fired generators to procure natural gas supply and pipeline transportation capacity to serve their obligations; or (2) show cause why such changes are not necessary. In the second order, the Commission instituted proceedings, under section 5 of the Natural Gas Act (NGA)21 to ensure that 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.22

B. NAESB

17. Following issuance of the NOPR, NAESB reconvened the Gas Electric Harmonization (GEH) Forum as the platform for the gas and electric industries to consider the NOPR proposals, as well as to develop any consensus-based alternatives to the NOPR proposals.23 The GEH Forum was tasked with developing a recommendation for consideration by the NAESB Board of Directors (Board). The GEH Forum and NAESB Board convened several meetings between April and June 2014 with nearly five hundred active participants and over seven-hundred participants monitoring the activity, representing all facets of the wholesale gas and wholesale electric markets.24

18. Four alternatives to the NOPR proposal were considered during the final GEH Forum meeting.25 The day-ahead and intraday nomination cycles in each package were the same, but the start of the Gas Day in each package was different. Disagreement over the start of the Gas Day prevented the GEH Forum from reaching consensus on any of the alternative proposals to the NOPR.27 The GEH Forum was also unable to reach consensus on an alternative proposal that did not define the Gas Day, but contained the same day-ahead and intraday nomination schedule as the four alternative proposals. Several participants expressed concern that any alternative proposal would be incomplete without a Gas Day start time, and indicated that they could not support a package that did not include the start of the Gas Day.28

19. Despite the inability of the GEH Forum to reach consensus, the NAESB Board directed the WGQ to proceed with the development of standards related to the day-ahead and intraday nomination cycles given the broad agreement among industry participants on those issues.29 Electric utilities could participate in the WGQ meetings, but only members of the WGQ were eligible to participate in the final vote (i.e., Wholesale Electric Quadrant (WEQ) members that are not also members of the WGQ, such as the ISO and RTO segment, were ineligible to vote on the standards).

20. On June 18, 2014, NAESB filed a status report with the Commission. On September 29, 2014, NAESB filed a second report to supplement the June 18 report and to inform the Commission of the modifications to the NAESB WGQ Business Practice Standards that were

18 The Commission did not propose any changes to the Evening Nomination Cycle.
23 The NAESB Board of Directors formally defined consensus of the GEH Forum as 67 percent affirmative vote of each of the wholesale gas and wholesale electric quadrants and 40 percent affirmative vote of each of the segments of the two quadrants.
25 Id. at 9.
26 Id. at 8. The nomination deadline for the Timely and Evening Nomination Cycles were the same as those proposed in the NOPR—1:00 p.m. CCT and 6:00 p.m. CCT, respectively. The modified NAESB standards proposed only three intraday nomination opportunities, instead of four as proposed in the NOPR. The nomination deadline for intraday 1, intraday 2 and intraday 4 would be at 10:00 a.m. (bump), 2:30 p.m. (bump), and 7:00 p.m. (no-bump), all CCT.
27 Id. at 9–10.
28 Id.
29 Id. at 10.
developed at the direction of the NAESB Board. The modified NAESB WGQ Business Practice Standards revise the nomination timeline to provide for three intraday nomination cycles in addition to the Timely and Evening Nomination Cycles. NAESB stated that nomination cycles are not dependent upon a specific start time to the Gas Day and are implementable with whichever time the Commission chooses as a start of the Gas Day. On November 26, 2014, NAESB filled another report to inform the Commission of the options the organization may pursue to respond to Commission action within the ninety-day deadline provided in the NOPR, if the Commission adopts regulations not approved by NAESB.

C. Subsequent Developments
21. On October 15, 2014, the Commission issued a notice of NAESB’s September 29 report. The notice provided that comments in response to the NOPR should address the alternate proposal to NAESB by the Desert Southwest Pipeline Stakeholders during the formal comment period on the proposed modifications to the NAESB WGQ standards. Comments on the NOPR were due on November 28, 2014. Seventy-five comments were filed. Comments were received from all sectors of both industries, including ISOs and RTOs, electric utilities, interstate natural gas pipelines, local distribution companies (LDC), producers, state regulators, electric and natural gas service, and electric transmission, natural gas and electricity industries, and other interested persons.


II. Discussion
23. Based on the record developed in this proceeding, the Commission is taking final action to address certain nationwide coordination challenges resulting from the divergent interstate natural gas pipeline and electric utility scheduling practices. The Commission is revising its regulations to incorporate by reference the modified NAESB WGQ Business Practice Standards, which revise the standard nomination timeline for interstate natural gas pipelines. These changes will revise the most liquid nomination cycle for scheduling natural gas transportation, the nationwide day-ahead Timely Nomination Cycle, so that the nomination deadline will be 1:00 p.m. CCT rather than 11:30 a.m. CCT, and the natural gas and electric industries support this change. This change is further complemented by NAESB’s revised three intraday nomination cycles that will provide shippers with greater flexibility to revise their nominations to adjust to system conditions and changes to load during the Gas Day. The addition of an afternoon bump cycle, together with a later, evening no-bump cycle, should afford firm transportation shippers, particularly those in the western United States, more of an opportunity to revise nominations to take into account weather and load changes. The comments in this proceeding show that these nationwide changes are supported broadly across the natural gas and electric industries.

25. The Commission does not find a sufficient record at this time to revise the nationwide Gas Day start time as proposed in the NOPR. As discussed in more detail below, it is not clear that requiring a change in the Gas Day start time would provide sufficient benefits to outweigh the operational and safety impacts and costs of making such a change. The record developed here—including the comments received on the NOPR proposal and the data responses submitted by the ISOs and RTOs—suggests that the concerns underlying the proposal to change the Gas Day start time, to the extent they exist, are primarily regional in nature. As a result, we find that it is appropriate to allow the changes to the standard natural gas pipeline nomination timelines in this
Final Rule, as well as changes to market rules and practices in the electric industry, to be implemented and evaluated without changing the nationwide Gas Day. While we will not revise the nationwide Gas Day in this proceeding, ongoing regional efforts to address electricity market reforms and fuel assurance, and the individual section 206 proceedings initiated by the Commission to review ISO and RTO day-ahead scheduling practices, provide opportunities to seek regional solutions to the concerns underlying the Gas Day proposal in the NOPR.

III. Gas Day

A. NOPR Proposal

26. In the NOPR, the Commission proposed to move the start of the Gas Day from 9:00 a.m. CCT to 4:00 a.m. CCT. The Commission expressed concern about the potential impact of the difference in start times of the natural gas and electric operating days on the reliable and efficient operation of electric transmission system and interstate natural gas pipelines. Specifically, the Commission identified two problems resulting from the natural gas and electric operating days beginning at different times. First, the electric operating day currently extends over two Gas Days. Therefore, gas-fired generators committed across a single electric operating day must procure gas supply and schedule gas transportation across two Gas Days. Second, the current 9:00 a.m. 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 transportation service.

27. The Commission proposed to move the start of the Gas Day earlier, to 4:00 a.m. CCT, to address concerns expressed by several commenters—such as ISO–NE and NYISO—that the current Gas Day start time presents operational challenges resulting in gas-fired generators running out of scheduled natural gas capacity during the morning electric ramp period, and having to wait until 9:00 a.m. CCT before being able to rely on their next day gas nomination. The Commission stated that this change 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 and, therefore, the proposal should largely eliminate the concern that some gas-fired generators will be unable to run during a substantial part of the morning electric ramp period because they have burned through their nominated gas before the start of the next Gas Day.

B. NOPR Comments

28. Thirteen commenters, particularly electric industry participants, filed comments in support of the Commission’s proposal to move the start of the Gas Day to 4:00 a.m. CCT. These commenters argue that, currently, operational problems and logistical challenges result from the electric operating day extending over two Gas Days and the fact that the current 9:00 a.m. CCT Gas Day splits the morning electric load ramp into two Gas Days. Southern Company explains that under the current 9:00 a.m. CCT Gas Day, sharp early morning ramps in the winter take place at the end of the Gas Day resulting in gas-fired generators’ hourly gas usage markedly increasing over the last eight hours of the Gas Day. According to Southern Company, because of this timing its system operators’ operating gas-fired units, instead of during the morning electric ramp period because they have burned through their nominated gas before the start of the next Gas Day.

29. ISO–NE states that under the current 9:00 a.m. CCT Gas Day, the preceding Gas Day ends—with supplies and daily transportation quantities from that preceding day potentially running short—just when gas-fired generation is critically needed to ensure that electricity supply is available to match demand during the morning electric load ramp. ISO states that generators could exhaust gas supply by incorrectly anticipating their next day electric schedule, or by operating differently in real-time than anticipated when nominating day-ahead gas supplies.

30. Some commenters state that moving the Gas Day to 4:00 a.m. CCT or earlier would be helpful to owners of gas-fired resources by allowing them to nominate and schedule their fuel and transportation requirements in the day-ahead Timely Nomination Cycle—the most liquid cycle—to cover the morning electric ramp and the evening peak of a single electric day while also being able to make adjustments throughout the day in the intraday cycles. IRC and ISO–NE state that planning for and including the entire morning electric ramp in the initial Gas Day operating plan is inherently more reliable to serve electric load requirements. ISO–NE states that moving the start of the Gas Day earlier should address instances when gas-fired generators find they are running out of scheduled natural gas capacity during the morning ramp period and have to wait until the 9:00 a.m. CCT start of the Gas Day to obtain additional supply or transportation. Equipower and Con Edison state that the start of the Gas Day will benefit system reliability in that generators exhausting their gas supply prior to the end of the Gas Day will do so during the middle of the night, when both the gas and electric systems are in a relatively low-load, steady-state condition and electric system operators have more flexibility to increase output from slow-ramping units, instead of during the morning ramping hours. Southern Company explains that with the start of the Gas Day moved to 4:00 a.m. CCT, operators can eliminate five hours of significant gas burn from the latter half of the preceding Gas Day and shift the steepest part of the morning ramp into the beginning of the next Gas Day when operators have the most flexibility to address their needs by adjusting gas scheduling and/or generation for the remaining hours. This shift would eliminate the current problem of system operators holding back gas consumption during the evening peak because of the morning electric ramp.

31. ISO–NE states that the current Gas Day start time also straddles a time of peak gas demand for other pipeline shippers, such as LDCs, which further inhibits the ability to trade gas during the morning ramp. Con Edison asserts that, on the natural gas side, a 4:00 a.m. CCT start of the Gas Day would avoid virtually all of the natural gas ramping.
period. According to Con Edison, this would allow natural gas system operators time to respond before loads reach their peak by, for example, shifting receipts among gate stations and/or utilizing on-system storage if there is an event on its system. Furthermore, Con Edison states that forecast deviations should also be reduced if a 4:00 a.m. CCT start of the Gas Day is approved because it would minimize the time between when natural gas is purchased and nominated and when it is consumed.

Thirty-five commenters, particularly natural gas industry participants, support the retention of the current 9:00 a.m. CCT Gas Day and oppose the Commission’s proposal to move the start of the Gas Day to 4:00 a.m. CCT.

33. INGAA and Direct Energy contend that generator de-rates may have a number of causes unrelated to the Gas Day start time such as nominations or RTO’s request for generation. Numerous commenters also argue that it is highly uncertain that a 4:00 a.m. CCT Gas Day would increase electric reliability and that the speculative benefits of such a change appear limited.

34. Many commenters state that an earlier start to the Gas Day will not create additional capacity on pipelines during peak demand conditions to meet large swings in generator demand nor will it solve critical pipeline capacity availability issues that some regions are experiencing, particularly on a long-term basis. Several commenters emphasize that the problems involving gas-electric coordination identified in the NOPR exist primarily in New England, are generally isolated to a single customer class, and, therefore, urge regional changes to be implemented. Dominion and IPAA state that the NOPR appears designed to address the problems identified by the electric market participants in the Northeast, but fails to take into account concerns in other regions of the country or the concerns of the gas industry as a whole.

35. Numerous commenters raise concerns regarding the potential for adverse impacts on reliability and safety and the danger of increased operational risk to the natural gas industry resulting from a 4:00 a.m. CCT Gas Day, particularly in the west. For example, AGA states that the vast natural gas infrastructure is, in many instances, unmanned and not supported electronically, thus often requiring the dispatch of personnel to remote worksites to make the necessary physical changes to maintain services and operations. INGAA and NiSource explain that, despite the industry’s move toward the use of automated systems such as supervisory control and data acquisition (SCADA), there are still numerous situations in which a pipeline needs to employ on-site field technicians to staff certain types of equipment to ensure safe and efficient facility operations and to make any necessary manual adjustments.

Commenters argue that changing the start of the Gas Day to 4:00 a.m. CCT may create operational and safety risks due to the increased need for field work along the gas supply chain during nighttime hours, particularly during emergency situations when bad weather may exacerbate the effects of darkness. New England LDCs state that while LDCs would take additional precautions to mitigate the risk of employee undertaking tasks when it is fully dark, even with artificial lighting, the total light available is likely to be less that provided by natural daylight and that electric power is not available in many places.

36. Numerous commenters argue that a 4:00 a.m. CCT Gas Day would result in performing certain critical operations, which require complex and risky worker decision making, at a time when many operators may suffer from fatigue or lack of concentration. Commenters state that this change would increase the risk of worker error, impaired reaction time, situational awareness, judgment, attention, memory and resulting accidents and injury to personnel due to fatigue from interrupted sleep cycles. Commenters cite studies identifying serious and substantial pipeline safety risks due to human fatigue in the Control Room and providing recommendations to avoid critical decision making and communication between 2:00 a.m. and 6:00 a.m. local time.

37. AGA, New England LDCs, and CenterPoint contend that a flurry of significant activities occur approximately three hours before or at the start of the Gas Day and that these activities include: Updating weather forecasts, forecasting demand from various customer groups (including gas-fired generators), forecasting interruptible service requirements, verifying volumes from interconnected pipelines, determining operational issues and notifications on interconnected pipelines, evaluating supply options, evaluating balancing needs, coordinating...
activities would be difficult or costly to do if the Gas Day start time were moved to 4:00 a.m. CCT.\textsuperscript{66} Commenters also state that, in providing reliable service, pipelines and LDCs are required to make manual changes to numerous facilities throughout the country prior to the start of every Gas Day to ensure delivery.\textsuperscript{67} National Grid states that requiring these changes to occur at 4:00 a.m. CCT would place unnecessary operational and financial burdens on LDCs and could adversely affect their ability to prepare to meet morning natural gas load demands.\textsuperscript{68}

38. Commenters note that requiring workers to travel in the dark is particularly problematic for facilities located in remote areas.\textsuperscript{69} Some safety concerns associated with employees on roads in these early hours include: Decreased visibility, roads not yet cleared of ice or snow, decreased mental alertness of employees and other drivers, and increased animal activity on roads.\textsuperscript{70} Thus, NGSA states that operational practicalities would create a need to delay field work until daylight hours when conditions are more conducive to a safe working environment.\textsuperscript{71}

39. Commenters state that the optimum time for packing the pipeline\textsuperscript{72} is when customer demands are low and, therefore, pipelines and LDCs with pipeline operations currently use the late night and early morning hours to pack their systems in anticipation of the morning load.\textsuperscript{73} Commenters state that, particularly in the west, the proposed Gas Day change would reduce the number of hours available to pack the pipeline, thus jeopardizing the ability of pipeline operators to pressurize their systems to meet peak morning natural gas demands.\textsuperscript{74}

40. Some commenters assert that moving the Gas Day earlier will also make it more difficult for gas industry participants to coordinate necessary activities.\textsuperscript{75} INGAA and NGSA state that, given the number of transactions and operational and administrative issues involved in addressing issues that may arise near the beginning of the Gas Day,\textsuperscript{76} and given the unbalanced nature of the industry, daily coordination among industry participants is required to ensure the uninterrupted delivery of gas to those who need it.

41. NW Industrial Gas Users and New England LDCs argue that their regions rely on Canadian supplies and, since Canadian pipelines will not necessarily switch their Gas Day start time in response to a Commission ruling, mismatches at U.S.-Canadian delivery points into U.S. pipelines could cause delays and/or interruptions in flows as well as operational difficulties for shippers scheduling gas deliveries using pipelines in both countries.\textsuperscript{78}

42. Enhanced Reliability Coalition and AF&PA state that if a 4:00 a.m. CCT Gas Day is adopted, all of the hours of flow for gas nominated in the intraday cycles would be reduced by five hours, resulting in approximately a 25 to 45 percent reduction, depending on the cycle.\textsuperscript{79} Commenters state that this change would eliminate the flexibility that the current intraday storage injections or withdrawals, planning for intraday gas flow changes, evaluating volume balancing needs of the current day, and adjusting peaking supply.\textsuperscript{80}

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\textsuperscript{66} AGA Comments at 29; CenterPoint at n. 7; New England LDCs Comments at 21
\textsuperscript{67} AGA states that a survey of LDCs revealed that nineteen out of fifty-three LDCs conduct manual operations hourly, and that another nineteen LDCs conduct manual operations daily. AGA Comments at 29 and 31. PG&E states that it has assessed its daily operations and concluded that annually, a minimum of 2,200 manual and 3,500 automated operating changes will shift to 4:00 a.m. (CCT), and thus during the night, rather than during the daylight hours, if the start of the Gas Day is changed. PG&E Comments at 3. See also DCP Comments at 3; Dominion Comments at 22; Enhanced Reliability Coalition Comments at 16; INGAA Comments at 24; National Grid Comments at 4; WBI Comments at 6.
\textsuperscript{68} National Grid Comments at 4
\textsuperscript{69} Texas Pipeline Association Comments at 12; CPG Comments at 7; INGAA Comments at 22; IOGA Comments at 4; WBI Comments at 6; ERC Comments at 16; DCP Comments at 3; Texas Pipeline Association Comments at 13; NiSource Comments at 10.
\textsuperscript{70} CPG Comments at 7.
\textsuperscript{71} NGSA Comments at 12; INGAA Comments at 19.
\textsuperscript{72} Enhanced Reliability Coalition explains that pipelines generally accommodate the hourly differences in supply and demand through storage and the build-up of system inventory, that is, system packing, in which gas is accumulated within the pipeline system in order to meet the rapid outflows often needed by customers. Enhanced Reliability Coalition Comments at 7.
\textsuperscript{73} AGA Comments at 30–31; Dominion Comments at 26; Enhanced Reliability Coalition Comments at 7–8; Northwest Gas Association Comments at 2; PG&E Comments at 6.
\textsuperscript{74} Dominion Comments at 20; Enhanced Reliability Coalition Comments at 8–9; Northwest Gas Association Comments at 2; Puget Comments at 6.
\textsuperscript{75} INGAA Comments at 18–19; Natural Gas Council Comments at 9–10; NGSA Comments at 11–13.
\textsuperscript{76} For example, (1) there may be mismatches between nominations and actual gas receipts or deliveries, (2) gas may not come on-line as planned or expected, (3) equipment may malfunction, especially in cold weather, (4) not all equipment is automated, (5) gas flows may need to be redirected manually from one pipeline to another, and (6) maintenance projects may affect gas flows.
\textsuperscript{77} INGAA Comments at 18–19; Natural Gas Council Comments at 9–10.
\textsuperscript{78} New England LDCs Comments at 23–24; NW Industrial Gas Users Comments at 4.
\textsuperscript{79} AF&PA Comments at 9–10; Enhanced Reliability Coalition Comments at 19.
\textsuperscript{80} AF&PA Comments at 9–10; Enhanced Reliability Coalition Comments at 20; MSGC Comments at 12–13.
\textsuperscript{81} AGA Comments at 30; Calpine Comments at 14; CenterPoint Comments at n.7, INGAA Comments at 21; Natural Gas Council Comments at 18; NiSource Comments at 6–7; Puget Comments at 8; Spectra Comments at 4.
\textsuperscript{82} AGA Comments at 30; Calpine Comments at 15; Enhanced Reliability Coalition Comments at 14; INGAA Comments at 21; Natural Gas Council Comments at 18; NiSource Comments at 6–7; Spectra Comments at 4.
\textsuperscript{83} AGA Comments at 30; Calpine Comments at 15; Enhanced Reliability Coalition Comments at 14; INGAA Comments at 21; Natural Gas Council Comments at 18; NiSource Comments at 6–7; Spectra Comments at 4.
\textsuperscript{84} AGA Comments at 30; InGAA Comments at 18–19; Natural Gas Council Comments at 18; NiSource Comments at 6–7; Spectra Comments at 4.
\textsuperscript{85} Texas Pipeline Comments at 15; Enhanced Reliability Coalition Comments at 14; INGAA Comments at 21; Natural Gas Council Comments at 18; NiSource Comments at 6–7; Spectra Comments at 4.
Association, Gas Processors Association, and INGAA state that this change would also require the modification and renegotiation of numerous non-jurisdictional contracts that specify a 9:00 a.m. CCT Gas Day. 46

45. CenterPoint Energy, Northern Municipal Distributors/Midwest Region Gas Task Force, and New England LDCs assert that a 4:00 a.m. CCT Gas Day would negatively impact interruptible customers served by LDCs, including electric generation customers. 87 CenterPoint and Northern Municipal Distributors/Midwest Region Gas Task Force contend that shifting the Gas Day to 4:00 a.m. CCT would be difficult for these interruptible customers because they do not have employees available for a third overnight shift to accommodate late changes and would therefore have to discontinue use of gas earlier in the day. 88 CenterPoint states that this change may reduce reliability and jeopardize service to firm customers which could include electric generation customers. 89

46. Essential Power urges the Commission to adopt a 12:00 a.m. Eastern Prevailing Time (EPT) Gas Day to align with the electric day and allow a generator to match its gas purchases and electric operation in the dispatch day. 90 If the Commission ultimately determines that an earlier start to the Gas Day is necessary, National Grid recommends moving the start to 12:00 a.m. CCT to align with the electricity operating day for most electric utilities. 91 MSCG, however, proposes that it is not practical to implement a uniform operating day that requires electric system operators to adapt to the natural gas system’s commercial practices and therefore, states the uniform day should start at a time later than 4:00 a.m. CCT. 92 AGA, Con Edison, Dominion, EPSA, ISO–NE, and National Fuel argue that the Commission should not consider other Gas Day start times between 4:00 a.m. and 9:00 a.m. CCT. 93

47. Gas industry participants cite high cost as a key reason for opposing the Gas Day proposal. 94 A number of commenters discuss the information technology and staffing costs associated with the proposal including providing overtime compensation, hiring new employees to cover the earlier start to the Gas Day, retraining employees, and reprogramming SCADA systems. 95 Commenters provided a range of cost estimates for SCADA/IT modifications and staffing requirements, with some above $3 million. 96 Several commenters also discuss the costs of mitigating safety issues raised by moving the Gas Day to 4:00 a.m. CCT. 97 Dominion states that approximately $2.5 million will be required to modify tariffs and contracts. 98 MSCG and BHE estimate the overall cost of compliance with the NOPR changes, including the changes to the Gas Day, will be in the $5 million range for one jurisdictional interstate natural gas pipeline, which indicates the cost of compliance for all 166 interstate natural gas pipelines would far exceed the $7.5 million estimated in the NOPR. 99

48. Commenters also address the significant costs entities other than interstate natural gas pipelines will incur as a result of the Proposed Rule. 100 PG&E states that compliance with the Gas Day proposal will result in an estimated one-time implementation cost of between $2 and $3 million for the reprogramming of SCADA systems, metering devices, and information technology management systems, as well as estimated ongoing annual costs of $600,000 for additional nighttime field personnel, traders, schedulers, and other staff-related costs. 101 Puget states that aligning their operations with the Gas Day proposal would have an estimated one-time implementation cost of $300,000 for modifications related to their SCADA system, metering devices, and information technology management systems. 102 Downstream gas industry commenters (e.g., LDCs) also caution that interstate pipelines will raise rates for pipeline transportation and storage services in order to recover the compliance costs of implementing the Gas Day proposal. 103

C. Data Request and ISO and RTO Responses

49. On December 12, 2014, the Commission staff requested data, for 2013 and 2014, from each of the six jurisdictional ISOs and RTOs regarding the impact on reliable and efficient operations of natural gas-fired generators running out of their daily nomination of natural gas transportation service during the morning electric ramp, to the extent this occurs.

50. In its response, CAISO states that it believes gas-fired generators in its balancing authority generally do not face problems securing sufficient fuel to meet the morning electric ramp under existing electric and gas market timelines. 104 CAISO was not able to locate any record of a gas-fired generator de-rating a unit during the hours of 3:00 a.m. and 9:00 a.m. CCT due to the generator exhausting its daily nomination of natural gas transportation service prior to the end of the Gas Day. 105 CAISO states that it does not believe it has committed generation out of merit order in anticipation of natural gas-fired generators running out of their nominated gas transportation at the end of the Gas Day. 106 The data submitted by CAISO indicates that in 2013 and 2014 fuel-related gas-fired generator outages and de-rates during the morning electric ramp were about as common on average as fuel-related de-rates during the other hours of the operating day. 107

101 See, e.g., AGA Comments at 8; BHE Comments at 9, 10; PG&E Comments at 7–8.

102 See, e.g., AGA Comments at 8; BHE Comments at 9–10; American Public Gas Association Comments at 14–15; BHE Comments at 4 & 9–13; Center Point Comments at 4–6; Dominion Comments at 17, 20, 25–27; DTE Comments at 3; INGAA Comments at 27; National Grid Comments at 15; New England LDCs Comments at 2; Proalty Comments at 17, 20, 25–27; DTE Comments at 3; IECA Comments at 15; BHE Comments at 11; IECA Comments at 5–6; INGAA Comments at 27; New England LDCs Comments at 25; MSCG Comments at 17; NiSource Comments at 5.

103 See, e.g., AGA Comments at 8; BHE Comments at 9, 10; American Public Gas Association Comments at 14–15; BHE Comments at 4 & 9–13; Center Point Comments at 4–6; Dominion Comments at 17, 20, 25–27; DTE Comments at 3; INGAA Comments at 27; National Grid Comments at 15; New England LDCs Comments at 2; Proalty Comments at 17, 20, 25–27; DTE Comments at 3; IECA Comments at 15; BHE Comments at 11; IECA Comments at 5–6; INGAA Comments at 27; New England LDCs Comments at 25; MSCG Comments at 17; NiSource Comments at 5.

104 See, e.g., AGA Comments at 8; BHE Comments at 9, 10; American Public Gas Association Comments at 14–15; BHE Comments at 4 & 9–13; Center Point Comments at 4–6; Dominion Comments at 17, 20, 25–27; DTE Comments at 3; IECA Comments at 15; BHE Comments at 11; IECA Comments at 5–6; INGAA Comments at 27; New England LDCs Comments at 25; MSCG Comments at 17; NiSource Comments at 5.

105 See Tables 1 and 2 CAISO Data Response at 6. In 2013 and 2014, 17 percent to 33 percent of fuel-related de-rates and outages occurred during the hours of 3:00 a.m. and 9:00 a.m.
51. MISO states that it has not experienced any significant impacts caused by generators running out of natural gas during the morning ramp.\(^{107}\) MISO explains that its data of power plants’ actual performance and equipment failures does not reflect if fuel-related outages were specifically due to generators having exhausted their daily nomination of natural gas transportation service prior to the end of the Gas Day.\(^{108}\) MISO submitted data providing the numbers of natural gas-fired units reporting outages and de-rates with a cause related to fuel during each month of 2013 and January through September 2014.\(^{109}\) In 2013, there were relatively few fuel-related gas-fired generator outages and de-rates. In January and February of 2014, MISO experienced far more fuel-related gas-fired generator outages and de-rates, however, no more than 20 percent of the de-rates occurred during the morning ramp period. In addition, MISO states that it has made many recent enhancements to improve transparency of fuel-related matters in the planning and operating horizons.\(^{110}\)

52. In its response, SPP states that it does not require generators to submit information related to their nominated gas transportation, therefore, SPP does not have information responsive to the request regarding de-rates due to gas-fired generators having exhausted their daily nomination of natural gas transportation service prior to the end of the Gas Day. SPP further states that it has not committed generation out of merit order in anticipation of natural gas-fired generators running out of nominated gas transportation.\(^{111}\) The data submitted by SPP indicates that in 2013 and 2014 fuel related gas-fired generator outages and de-rates during the morning electric ramp were about as common on average as fuel-related de-rates during the other hours of the operating day.\(^{112}\)

53. ISO–NE, NYISO, and PJM provided supplemental data regarding gas-fired generator de-rates in 2013 and 2014 due to issues related to fuel limitations/availability. PJM and NYISO requested privileged treatment of certain data submitted in response to the data request. ISO–NE provided, among other data, information on time periods when generators reported reductions (i.e., de-rates) due to fuel limitations. ISO–NE states that during 2013 and 2014 there were 173 reported gas-fired generator de-rates due to fuel limitations and 67 of those were logged between 3:00 a.m. and 9:00 a.m. CCT. The morning de-rates affected forty-nine days. To see if generators were de-rating due to running out of gas, ISO–NE examined the reductions that ended when the next Gas Day began (9:00 a.m. CCT).\(^{113}\) In 2013 and 2014, twenty gas-fired generator de-rates due to fuel limitations, over 14 days, had an identified ending time that coincided with the start of the next Gas Day at 9:00 a.m. CCT. While ISO–NE states that it does not know whether the de-rates occurred solely due to the exhaustion of natural gas pipeline nominations, given the 9:00 a.m. CCT ending time of the de-rates, ISO–NE believes this is likely the cause. ISO–NE further states that the issues related to the availability of gas-fired resources in New England are even more critical than the data provided shows and that the severity of these issues has been masked because system operators are required to take actions that diminish the frequency of generation outage impacts due to gas reductions.\(^{114}\)

![Table 2](image_url)

<table>
<thead>
<tr>
<th>Year</th>
<th>morning ramp 3:00 a.m.–9:00 a.m. CCT</th>
<th>with end time of 9:00 a.m. CCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>97</td>
<td>39</td>
</tr>
<tr>
<td>2014</td>
<td>76</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>67</td>
</tr>
</tbody>
</table>

Source: ISO–NE Data Response at 2 and Attachment A.

55. PJM provided a summary of the outage notifications due to lack of fuel from natural gas-fired generators in 2013 and 2014 and non-confidential system conditions on the relevant interstate natural gas pipelines and LDCs.\(^{115}\) According to PJM’s data response, in 2013, 62 percent of the unique generators that reported lack of fuel outages are located behind an LDC.\(^{116}\) PJM also reports that 54 percent of the generators reporting outages due to lack of fuel in 2014 are located behind an LDC. In 2014, 60 percent of the generator-reported lack of fuel outages occurred in January. The confidential overhead pipeline operations display in the control room; and (5) a new consolidated pipeline notice Web page. MISO Data Response at 5.

113 While these data do not show specifically whether the generators exceeded their firm gas transportation schedule for the day, ISO–NE states that the data suggests that the de-rates likely resulted from the exhaustion of natural gas transportation service, because the generators were able to come back on line at the start of the new Gas Day.

114 ISO–NE Data Response at 1.

115 See Table 3, PJM Data Response at 4. PJM notes that this information may not be complete, as this data is not information required by PJM. PJM collected these data from publicly available information.

116 A gas-fired generator may be limited in its ability to receive or take gas in instances when there are constraints on an LDC system, regardless of whether the gas-fired generator has sufficient remaining nominated quantities of interstate pipeline transportation.
via Supplemental Resource Evaluation on days with de-rates greater than 225 MW in any given hour. NYISO states that given the times the Supplemental Resource Evaluations occurred, it is not clear that any of the Supplemental Resource Evaluations were issued in response to a generator de-rating due to having exhausted its daily nomination of natural gas transportation service prior to the end of the Gas Day. Instead, NYISO states the de-rates were more likely related to limitations on natural gas customers’ ability to receive or take gas, such as Operational Flow Orders (OFO), which require gas customers to operate within tight tolerances, or generator specific issues that may, or may not, be related to the availability of gas supply.

57. The confidential data submitted by NYISO shows the number of gas-fired generator de-rates and the amount of energy reduced generally decreased between 3:00 a.m. and 9:00 a.m. CCT. Specifically, over all of 2013 and all of 2014, the total (by hour) number of gas-fired generator de-rates related to fuel availability fell as the morning progressed (between hours ending at 4:00 a.m. CCT and 9:00 a.m. CCT).

Similarly, over all of 2013 and all of 2014, the total (by hour) amount of energy reduced later in the morning was less than the early-morning reductions. If fuel related de-rates were caused by exhaustion of nominated natural gas transportation capacity, the impact of the de-rates would likely have been steady or worsening as more generating units ran out of gas as the morning progressed towards 9:00 a.m. CCT.

58. To provide another perspective on the overall impact on reliability of the gas-fired generator de-rates during the morning ramp, the Commission examined the monthly and hourly average values of resulting energy reductions as a percentage of the available operating reserves.

Commission staff analysis of the data response indicates that, in ISO–NE during 2013 and 2014, the energy reductions were minimal relative to the operating reserves available to ISO–NE at the time.

59. In NYISO, during certain winter months, Commission staff analysis of the data response indicates that the average hourly reductions were potentially significant relative to the operating reserves available to the NYISO, ranging up to 5.7 percent of reserves. For all other months of 2013 and 2014, the average hourly reductions in NYISO were less than one percent of the available operating reserves.

TABLE 3—Gas-Fired Generator Reductions (De-Rates) as a Percent of Available Operating Reserves in ISO–NE

<table>
<thead>
<tr>
<th>Hour beginning (CCT)</th>
<th>All 2014 (%)</th>
<th>All 2013 (%)</th>
<th>Jan 2014 (%)</th>
<th>Mar 2014 (%)</th>
<th>Nov 14 (%)</th>
<th>Jan 2013 (%)</th>
<th>Feb 2013 (%)</th>
<th>Mar 2013 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 a.m.</td>
<td>0.47</td>
<td>0.69</td>
<td>0.14</td>
<td>1.08</td>
<td>2.10</td>
<td>0.00</td>
<td>0.90</td>
<td>1.47</td>
</tr>
<tr>
<td>4 a.m.</td>
<td>0.39</td>
<td>0.49</td>
<td>0.14</td>
<td>0.69</td>
<td>2.11</td>
<td>0.00</td>
<td>0.53</td>
<td>0.83</td>
</tr>
<tr>
<td>5 a.m.</td>
<td>0.26</td>
<td>0.32</td>
<td>0.07</td>
<td>0.01</td>
<td>2.11</td>
<td>0.02</td>
<td>0.91</td>
<td>0.01</td>
</tr>
<tr>
<td>6 a.m.</td>
<td>0.29</td>
<td>0.48</td>
<td>0.17</td>
<td>0.18</td>
<td>2.11</td>
<td>0.16</td>
<td>1.38</td>
<td>0.06</td>
</tr>
<tr>
<td>7 a.m.</td>
<td>0.43</td>
<td>0.61</td>
<td>0.57</td>
<td>0.31</td>
<td>2.11</td>
<td>0.42</td>
<td>1.25</td>
<td>0.43</td>
</tr>
<tr>
<td>8 a.m.</td>
<td>0.55</td>
<td>0.70</td>
<td>0.57</td>
<td>0.47</td>
<td>2.11</td>
<td>0.61</td>
<td>1.00</td>
<td>0.92</td>
</tr>
</tbody>
</table>

60. In PJM in the winter months of 2014, Commission staff analysis of the data response indicates that the average hourly reductions were large relative to the operating reserves available to the ISO at the time, ranging from 16.8 percent to 72.3 percent. The average hourly reductions in the winter months of 2013 were also significant relative to the operating reserves available to PJM, ranging from 5.6 percent to 10.1 percent.

TABLE 4—Gas-Fired Generator Reductions (De-Rates) as a Percent of Available Operating Reserves in NYISO

<table>
<thead>
<tr>
<th>Hour beginning (CT)</th>
<th>All 2014 (%)</th>
<th>All 2013 (%)</th>
<th>Jan 2014 (%)</th>
<th>Feb 2014 (%)</th>
<th>Jan 2013 (%)</th>
<th>Dec 2013 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 a.m.</td>
<td>1.6</td>
<td>2.1</td>
<td>3.7</td>
<td>1.9</td>
<td>3.4</td>
<td>6.1</td>
</tr>
<tr>
<td>4:00 a.m.</td>
<td>1.5</td>
<td>1.9</td>
<td>4.0</td>
<td>1.8</td>
<td>3.2</td>
<td>3.8</td>
</tr>
<tr>
<td>5:00 a.m.</td>
<td>1.7</td>
<td>2.1</td>
<td>3.8</td>
<td>2.2</td>
<td>3.5</td>
<td>4.9</td>
</tr>
<tr>
<td>6:00 a.m.</td>
<td>2.2</td>
<td>1.9</td>
<td>4.5</td>
<td>2.5</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td>7:00 a.m.</td>
<td>3.2</td>
<td>2.0</td>
<td>5.4</td>
<td>2.3</td>
<td>2.7</td>
<td>3.1</td>
</tr>
<tr>
<td>8:00 a.m.</td>
<td>3.6</td>
<td>2.3</td>
<td>5.7</td>
<td>1.3</td>
<td>3.1</td>
<td>2.9</td>
</tr>
</tbody>
</table>
D. Comments on Data Request

61. American Public Gas Association, New England LDCs, the Enhanced Reliability Coalition, and Natural Gas Council filed comments regarding the ISOs’ and RTOs’ data responses. These commenters argue that the ISOs’ and RTOs’ responses clearly confirm that there is not a nationwide problem during the morning electric ramp associated with the current start time of the Gas Day.124 American Public Gas Association and Natural Gas Council contend that the data submitted by the ISOs and RTOs does not support the thesis that there is a causal link between the start of the Gas Day and the reliability of gas-fired generators.122 The Enhanced Reliability Coalition points out that in 2014, many of the instances in which generators in PJM indicated an outage due to lack of fuel occurred during OFOs issued by pipelines and that, in these circumstances, a change to the start of the Gas Day would not have remedied the generator outages.123 Natural Gas Council and New England LDCs state that the ISOs’ and RTOs’ responses fail to provide sufficient record evidence for the Commission to meet its burden under section 5 of the NGA that the current 9:00 a.m. CCT Gas Day start time is no longer just and reasonable, and that a 4:00 a.m. CCT start of the Gas Day is just and reasonable.124

E. Commission Determination

62. While certain efficiencies in scheduling could be achieved through better harmonization of the natural gas and electric operating days, the Commission concludes that the current record does not support changing the start time of the nationwide natural Gas Day at this time.

63. In the NOPR, the Commission expressed concern about the potential impact of the difference in start times of the natural gas and electric operating days on the reliable and efficient operation of electric transmission systems and interstate natural gas pipelines. In the NOPR, the Commission identified two problems resulting from the fact that the natural gas and electric operating days begin at different times. First, the electric operating day currently extends over two Gas Days. Therefore, natural gas-fired generators committed across a single electric operating day must procure gas supply and schedule gas transportation across two Gas Days. Second, the current 9:00 a.m. 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 transportation service. We find, based on the comments and data responses, that there is limited evidence to support the premise in the NOPR that the current start of the Gas Day results in natural gas-fired generators de-rating during the morning ramp due to exhausting nominated natural gas transportation. As described in comments, gas-fired generator de-rates may have a number of causes unrelated to the Gas Day start time, such as a nomination made based on only an estimate of needs (especially where the generator has not received a dispatch schedule from the system operator), an unscheduled change in an ISO’s or RTO’s real-time dispatch, or limitations on shippers’ ability to receive or take gas, among others.

64. In addition, evidence in the record provided through the ISO and RTO data responses did not provide sufficient support for changing the nationwide Gas Day. The responses generally show that, to the extent gas-fired generators de-rating during the morning ramp is a significant problem, it appears to be isolated to the winter months in specific regions.

65. SPP, MISO, and CAISO all reported no issue with gas-fired generator de-rates during the morning ramp. While ISO–NE, PJM, and NYISO provided data suggesting that some de-rates during the morning ramp are due to fuel-related issues, the data did not show whether those de-rates are specifically due to gas-fired generators running out of their daily nomination of natural gas transportation service. None of the ISOs’ or RTOs’ outage management systems collect data containing the level of detail and specificity to reflect if generator output reductions (i.e., de-rates) and outages were specifically due to natural gas-fired generators having exhausted their daily nomination of natural gas transportation. Rather, the ISOs and RTOs track de-rates and outages associated with the broad North American Electric Reliability Corporation (NERC) code for fuel-related issues which includes several other causes. Therefore, the Commission had to draw inferences based on the data submitted in the record.

66. The Commission concludes that there is limited evidence to support the NOPR proposal to change the Gas Day. For example, in ISO–NE very few gas-fired generator de-rates due to fuel limitations had an ending time that coincided with the start of the next Gas Day at 9:00 a.m. CCT in 2013 and 2014. In addition, in PJM, a majority of the fuel related gas-fired generator de-rates in 2014 and the vast majority of fuel-related gas-fired generator de-rates in 2013 were caused by a limited number of generating units. The Commission believes any conclusions that can be drawn from the PJM data are weakened by the idiosyncrasies of these units. Therefore, although gas-fired generator de-rates due to fuel limitations appear problematic in certain regions during certain times of the year, on balance, the Commission believes this does not warrant changing the nationwide Gas Day.

67. In addition, several commenters in this proceeding provide compelling arguments indicating that moving the

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nationwide Gas Day to 4:00 a.m. CCT will result in substantial nationwide costs and potential operational and safety impacts for the entire natural gas industry, including jurisdictional and non-jurisdictional entities. The natural gas industry has identified significant costs attendant on such a change, including the costs of hiring and retraining employees, providing overtime compensation, mitigating safety risks, modifying existing contracts, purchasing new equipment, and reprogramming SCADA systems, nomination software, and metering devices. The identified adverse operational and safety impacts include a potential for reduced nighttime hours to pack the pipeline, diminished opportunity for shippers to balance loads in the final hours of the Gas Day, increased need for field work during nighttime hours, and worker fatigue, among others.

68. Therefore, we find, based on the record, that there has not been a showing that the benefits of changing the nationwide Gas Day from 9:00 a.m. CCT to 4:00 a.m. CCT sufficiently outweigh the potential adverse operational and safety impacts on the natural gas industry to justify action under NGA section 5 to require a change in the start of the Gas Day.

69. While the Commission declines to take action in this proceeding to change the start of the Gas Day on a nation-wide basis, we note that since the issuance of the NOPR in March 2014 both ISO–NE and PJM (the two regions that appear to be of the most concern) have recently undertaken operational and market actions to address the availability and performance of generators, including gas-fired generators, in their forward markets.125 Beyond these measures, ISO–NE argues that the New England region needs its generating resources and other entities to make investments in firm fuel supplies and transportation, maintenance of on-site fuel inventory, and dual fuel capability.126 ISO–NE states that it is implementing the Pay-for-Performance proposal accepted by the Commission to provide incentives for these investments.127 Similarly, PJM is focusing on long-term procedural improvements in a recent Commission filing proposing a series of tariff reforms to ensure that resources committed as capacity to meet PJM’s reliability needs are obligated to deliver energy and reserves when called upon.128 These and other regional efforts to address generator performance may result in natural gas-fired generators and other market participants in these regions taking actions to alleviate some of the electric industry fuel supply concerns underlying the Gas Day proposal in the NOPR.129 In addition, the Commission is taking a range of actions in this Final Rule, as discussed below, to better coordinate the scheduling of the natural gas and wholesale electricity markets as well as to provide additional scheduling flexibility to all shippers on interstate natural gas pipelines.

70. In addition to these ongoing efforts, the individual ISO and RTO section 206 proceedings provide additional opportunities to seek regional solutions. As discussed further below, the 206 Order requires each ISO and RTO to adjust the time at which the results of its day-ahead energy market and reliability unit commitment process (or equivalent) are posted to a time that is sufficiently in advance of the Timely and Evening Nomination Cycle, respectively, to allow gas-fired generators to procure natural gas supply and pipeline transportation availability to serve their obligations, or show cause why such changes are not necessary. In the Section 206 Order the Commission encouraged each ISO and RTO to consider whether other market reforms would be appropriate.130 Such regional electric market changes to diminish the misalignment between the Gas Day and regional electric days may be less costly and result in far less negative operational impacts.

IV. Natural Gas Transportation Nomination Timeline

A. Background

71. 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 described above, and as shown in Table 1 above, under the current NAESB WGQ Standard 1.3.2 and the Commission’s regulations,131 natural gas pipelines must offer pipeline shippers a minimum of four nomination opportunities to schedule natural gas transportation. Shippers have two nomination opportunities prior to the day of gas flow, the Timely Nomination Cycle and the Evening Nomination Cycle, and two nomination opportunities on the day of gas flow (Intraday 1 and Intraday 2).

72. 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 highest priority,132 followed by secondary firm, within-the-path133 nominations.

125 In ISO–NE these measures include changes to the ISO tariff to: (1) Allow for better information sharing with the interstate pipelines; (2) enhance offer flexibility; (3) accelerate the timelines in the Day-Ahead Energy Market; (4) increase the amount of reserves procured in the Forward Reserve Market; (5) enhance Forward Reserve Market incentives; (6) improve generator auditing; and (7) redefine Shortage Events in the Forward Capacity Market.

Since January 2014 PJM has put into place a number of improvements to help ensure generator availability this winter including: (1) A process for generators to communicate any long-lead notification time they require to start in order to ensure fuel supply between the early morning hours and their forecasted start times.126 PJM is continuing to monitor the performance of these improvements.

126 ISO–NE Data Response at 7.


128 On March 31, 2015 Commission staff requested additional information from PJM regarding PJM’s proposal in Docket No. ER15-623-000.

129 In addition, the Commission recently issued an order directing each RTO and ISO to file reports on the status of its efforts to address fuel assurance issues. The Commission is currently reviewing the RTO and ISO reports and the comments submitted on those reports. Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators and Winter 2013–2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators, order on technical conferences, 149 FERC ¶ 61,145 (2014).

130 For example, RTOs and ISOs could consider the potential benefits, cost, and operational burdens of adjusting the timing of their operating day.

Section 206 Order, 146 FERC ¶ 61,202 at P 19 & n.14 (“In addition, we encourage RTOs and ISOs to consider whether other market reforms would be appropriate.”).


132 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).

133 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 certain zones for which they pay on a secondary firm basis.

134 Secondary firm nominations are firm nominations that include at least one secondary point. Within-the-path nominations are firm nominations that include all nominations that are connected to a primary nomination in a single contiguous path.
nominations, secondary firm, outside of the path nominations, and finally nominations from shippers holding interruptible transportation capacity. Before a pipeline schedules a shipper’s requested quantity under these standards, the pipeline confirms the shipper’s nomination with upstream and downstream entities 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 LDC, has sufficient capacity to accept that gas.

73. The Timely Nomination Cycle is the most liquid time to acquire both natural gas supply and transportation capacity. During the Timely Nomination 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 nominations. In subsequent nomination cycles, firm service, including secondary firm service, scheduled in an earlier cycle cannot be displaced or bumped by another firm nomination for that Gas Day. In addition, firm intraday nominations, including secondary firm nominations, have priority over, and thus can displace or bump, scheduled and flowing interruptible transportation. 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.” However, the final intraday nomination (Intraday 2) cycle is a “no-bump” cycle, meaning that interruptible transportation previously arranged for cannot be displaced or bumped by a firm Intraday 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.

74. 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 use these additional scheduling opportunities if the upstream or downstream pipelines cannot confirm those scheduling changes. Currently, several pipelines offer enhanced nomination services and some pipelines permit more frequent nominations than the four required by the current NAESB standards. 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.

B. Natural Gas Transportation Day-Ahead Cycles

75. The most liquid time to acquire natural gas supply for the next day occurs before the 11:30 a.m. CCT deadline for submitting nominations in the Timely Nomination Cycle. As a result, natural gas purchasers may have to pay a premium to obtain supply after the Timely Nomination Cycle, because there are fewer willing sellers later in the day. Also, it may be more difficult to obtain next-day firm transportation after the Timely Nomination Cycle, because firm transactions scheduled in the Timely Nomination Cycle cannot be bumped in later nomination cycles and ships may have already made capacity release arrangements for the next day. 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.

76. 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. 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. The following table shows for each ISO and RTO the deadline for submission of generator bids and the time the winning bids are posted by ISOs and RTOs in the day-ahead markets. As demonstrated by Table 6, 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.

<table>
<thead>
<tr>
<th>Table 6—Electric Commitment Results Publication Timetable</th>
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<tbody>
<tr>
<td><strong>ISO/RTO</strong></td>
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<tr>
<td>California Independent System Operator Corporation (CAISO)</td>
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<tr>
<td>ISO New England Inc. (ISO–NE)</td>
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<tr>
<td>PJM Interconnection, LLC (PJM)</td>
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<tr>
<td>Midcontinent Independent System Operator, Inc. (MISO)</td>
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<tr>
<td>New York Independent System Operator, Inc. (NYISO)</td>
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<tr>
<td>Southwest Power Pool, Inc. (SPP)</td>
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</table>

nominations where the nominated secondary receipt and/or delivery point is contained wholly within the primary points listed in the shipper’s contract.

135 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”).


137 Id. at 30.671.

138 See, e.g., Texas Gas, 137 FERC ¶ 61,093, order on compliance, 138 FERC ¶ 61,176; Gulf South, 141 FERC ¶ 61,262.

139 See, e.g., Tennessee Gas Pipeline Company, LLC’s Tariff, GT&A Section IV.2(e).

140 The Commission’s current capacity release program allows a firm shipper to sell (or release) its capacity to another entity when it is not using it. The releasing shipper releases its capacity by returning its capacity to the pipeline for reassignment to the replacement shipper. The pipeline contracts with, and receives payment from, the replacement shipper and then issues a credit to the releasing shipper. The results of all releases are posted by the pipeline on its Internet Web site and made available through standardized, downloadable files.
77. 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 natural gas supply and transportation capacity may not be available or economical, given the ISO and RTO day-ahead market clearing price.\textsuperscript{141} If a gas-fired generator acquires natural gas and transportation prior to learning whether it is dispatched, it runs the risk of having to sell off excess natural gas supply and pipeline transportation capacity during the less liquid Evening or intraday Nomination Cycles to the extent its bid does not clear the day-ahead market.\textsuperscript{142} If the gas-fired generator waits to acquire natural gas supply and transportation until its bid clears the day-ahead market, it would be doing so during the less liquid Evening or intraday Nomination Cycles, where the generator may be unable to acquire transportation capacity if the pipeline is fully scheduled. While during many periods of the year, gas-fired generators may be able to obtain natural gas and interstate natural gas capacity throughout the day, their ability to procure natural gas and transportation in the most liquid Timely Nomination Cycle may be critical to their ability to provide service during periods when the pipeline is constrained.

1. NOPR Proposal

78. The NOPR proposed to move the deadline for submitting nominations in the Timely Nomination Cycle from 11:30 a.m. CCT to 1:00 p.m. CCT to provide sufficient time for electric utilities to complete their processes for selecting day-ahead generating resources before the Timely Nomination Cycle. The NOPR did not propose any other changes to the Timely Nomination Cycle, including the existing 4:30 p.m. CCT deadline for the pipeline to provide notice of scheduled quantities. Thus, the NOPR proposed to shorten the time required to complete the Timely Nomination Cycle from five hours (11:30 a.m. CCT to 4:30 p.m. CCT) to three and one-half hours (1:00 p.m. CCT to 4:30 p.m. CCT). The NOPR did not propose any changes to the existing Evening Nomination Cycle, under which nominations must be submitted by 6:00 p.m. CCT, confirmations are completed by 9:00 p.m. CCT, and the pipeline notifies shippers of their scheduled quantities by 10:00 p.m. CCT.\textsuperscript{79} In an order issued contemporaneously with the NOPR, the Commission instituted a proceeding under section 206 of the FPA requiring each ISO and RTO within ninety days after the publication of a Final Rule in this docket to: (1) Make a filing that proposes tariff changes to adjust the time at which the results of its day-ahead energy market and reliability unit commitment process (or equivalent) are posted to a time that is sufficiently in advance of the Timely and Evening Nomination Cycles, respectively, to allow gas-fired generators to procure natural gas supply and pipeline transportation capacity to serve their obligations; or (2) show cause why such changes are not necessary.\textsuperscript{143}

80. The NOPR proposed that moving the Timely Nomination Cycle to 1:00 p.m. CCT, along with examining whether the ISOs and RTOs should modify their day-ahead market processes, could expand the options available to gas-fired generators. Under the NOPR proposal, gas-fired generators would have the option of arranging natural gas supply and pipeline transportation at the Timely Nomination Cycle knowing the results of the day-ahead electric market. This could minimize situations in which gas-fired generators, particularly those that opt to procure natural gas supply and pipeline 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 electric system operation. If gas-fired generators know whether they were committed in the day-ahead electric market prior to the Timely Nomination Cycle, they 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 electric 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.

81. It was recognized in the NOPR that moving the Timely Nomination Cycle to later in the day may impose systems and administrative costs on other interstate natural gas pipeline shippers. However, the NOPR concluded 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 NOPR concluded that the long-term benefits of ensuring a better coordinated natural gas and electric industry appear to warrant this change.

2. Revised NAESB Day-Ahead Nomination Cycles

82. Consistent with the NOPR, NAESB revised its standards to move the start of the Timely Nomination Cycle to 1:00 p.m. CCT, with scheduled quantities becoming effective at the start of the next Gas Day. However, unlike the NOPR, NAESB revised its standards to move the deadline for the pipeline to notify shippers of their scheduled quantities from 4:30 p.m. CCT to 5:00 p.m. CCT, stating the pipelines require at least four hours to complete the Timely Nomination Cycle.

83. While the NOPR did not propose any changes to the Evening Nomination Cycle, NAESB revised its standards to provide that that cycle be completed in three hours, rather than the current four hours, with shippers being notified of their scheduled quantities at 9:00 p.m. instead of 10:00 p.m. Under both the NOPR and NAESB’s revised standards, bumping of interruptible service is permitted in the Evening Nomination Cycle and, consistent with current Commission policy, already scheduled secondary firm service cannot be bumped. A comparison of the current NAESB day-ahead nomination cycles and the revised NAESB day-ahead nomination cycles are shown in Table 7 below.

141 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.

142 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”).

143 Section 206 Order, 146 FERC ¶ 61,202.
3. NOPR Comments

84. The large majority of commenters support moving the start time for the Timely Nomination Cycle from 11:30 a.m. CCT to 1:00 p.m. CCT, including commenters that do not generally support NAESB’s intraday nomination timeline.144 Many of the commenters that support NAESB’s nomination timeline state that, consistent with the Commission’s proposal, moving the Timely Nomination Cycle nomination deadline to 1:00 p.m. CCT will provide generators more time to acquire natural gas supply and pipeline transportation after learning their electric dispatch obligations, provided changes are made to the ISO and RTO scheduling processes.145 Several commenters state that moving the Timely Nomination Cycle deadline later will also reduce costs and improve efficiency among gas-fired generation units.146

85. A few commenters support moving the Timely Nomination Cycle, but believe that the 1:00 p.m. nomination deadline is too early in the day. Xcel Energy and SPP believe that the start time for the Timely Nomination Cycle should be extended to 2:00 p.m. CCT, respectively, arguing that a 1:00 p.m. CCT nomination deadline would not allow power generators in MISO’s and SPP’s market sufficient time to secure the gas necessary to support their bids.147 Similarly, Puget states that ISO and RTO bids will need to be awarded at least 1.5 hours prior to the NAESB Timely Nomination Cycle nomination deadline to allow energy schedulers adequate time to confirm transactions, exchange contracts, and enter nominations on pipelines.148

86. MSCP does not support moving the Timely Nomination Cycle nomination deadline, arguing that the proposed change affects one hundred percent of the gas market while only benefiting about a third of energy generators. One hundred percent of the gas market is served by ISOs and RTOs, while only about a third of generation is served by ISOs and RTOs. Manycommenters, from both the gas and electric industries, including commenters in the natural gas industry contend that the further the Timely Nomination Cycle process falls away from the business day, the more likely it is that producers, point operators, and shippers will be harder to reach to resolve nomination.

4. Commission Determination

87. The Commission is amending its regulations at Part 284 to incorporate by reference NAESB’s revised standards, which provide that the nomination deadline for the Timely Nomination Cycle shall be 1:00 p.m. CCT, with notice to shippers of scheduled quantities at 5:00 p.m. CCT, and the nomination deadline for the Evening Nomination Cycle shall remain at 6:00 p.m. CCT, with notice to shippers of scheduled quantities at 9:00 p.m. CCT. These changes, along with being generally consistent with the NOPR’s proposed 1:00 p.m. CCT start time for the Timely Nomination Cycle, are supported by the vast majority of the commenters, from both the gas and electric industries, including commenters that do not generally support NAESB’s revised intraday nomination timeline. NAESB’s revised 1:00 p.m. CCT start time for the Timely Nomination Cycle, like the NOPR’s proposed 1:00 p.m. CCT start time, will provide generators more time to acquire natural gas supply and pipeline transportation after learning their electric dispatch obligations, provided changes are made to the ISO and RTO scheduling processes. NAESB’s proposal to provide notice of scheduled quantities at 5:00 p.m. also enables gas industry participants to complete the Timely Nomination Cycle by the end of the business day, while still providing sufficient time for the nomination, confirmation and scheduling process.

88. The Commission declines to extend the deadline for submitting nominations in the Timely Nomination Cycle past 1:00 p.m. CCT, as requested by a few commenters. Such an extension would likely require corresponding changes in the remainder of the Timely Nomination Cycle process, including moving back NAESB’s proposed 5:00 p.m. CCT deadline for posting scheduled quantities. However, as many commenters point out, there needs to be sufficient time between the scheduled quantity posting of one cycle and the nomination deadline for the next cycle to enable shippers to review their transportation needs prior to the next nomination deadline. Further extending the Timely Nomination Cycle nomination deadline would reduce or do away completely with the time between when the Timely Nomination Cycle schedule is issued and the 6:00 p.m. deadline for submitting nominations in the Evening Nomination Cycle. Also, commenters in the natural gas industry contend that the further the Timely Nomination Cycle process falls outside of regular business hours, the more likely it is that producers, point operators, and shippers will be harder to reach to resolve nomination.

<table>
<thead>
<tr>
<th>TABLE 7—DAY-AHEAD NOMINATION CYCLES</th>
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<tr>
<td><strong>Time Shifts—All times CCT</strong></td>
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<tr>
<td><strong>Current NAESB standards</strong></td>
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<td><strong>Revised NAESB standards</strong></td>
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<tr>
<td>Timely:</td>
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<tr>
<td>Nomination Deadline</td>
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<td>Schedule Issued</td>
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<td>Start of Gas Flow</td>
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<td>Evening:</td>
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<tr>
<td>Nomination Deadline</td>
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<tr>
<td>Schedule Issued</td>
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<td>Start of Gas Flow</td>
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144 AGA Comments at 22; Ameren Comments at 1; ANGA Comments at 3; BHE Comments at 16–17; Calpine Comments at 7; Castex (Producer Coalition) Comments at 7; CenterPoint Comments 3–4; Con Edison Companies Comments at 9; CPG Comments at 5; Direct Energy Comments at 2; Dominion Comments at 3; DTE Gas Comments at 3; Duke Energy Comments at 3; EDF et al. Comments at 7–8; Enhanced Reliability Coalition Comments at 29; EPSA Comments at 7; EquiPower Comments at 9; ESI Comments at 3–4; Exelon Comments at 6; Gas Processors Association Comments at 1–2; NGAA Comments at 5; IOGA Comments at 5; IPPA Comments at 2; IRC Comments at 3; Kinder Morgan Comments at 6; National Fuel Distribution at 2–3; National Grid Comments at 1–2; Natural Gas Council Comments at 1–2; New England LDCs Comments at 30; NGSA Comments at 1–2; Nisource Comments at 2; Northwest Gas Association Comments at 2–3; Northwest Industrial Gas Users Comments at 5–6; PGC Comments at 4; PUCO Comments at 6–8; Puget Comments at 10; Sequent Comments at 6; Southern Companies Comments at 11; Southern Star Comments at 3; Spectra Comments at 4; Texas Pipeline Association Comments at 9; TVA Comments at 2; WBI Energy Comments at 4.

145 See, e.g., Calpine Comments at 8; CPG Comments at 6; Duke Energy Comments at 2–4; EquiPower Comments at 9; INGAA Comments at 5; National Grid Comments at 1–2; New England LDCs Comments at 31; NESCOE Comments at 4–5; PGC Comments at 4–5; PUCO Comments at 5–6.

146 See, e.g., EDF et al. Comments at 7–8; PUCO Comments at 5–6.

147 SPP Comments at 2–3; Xcel Energy Comments at 3–5.

148 Puget Comments at 13.

149 MSCG Comments at 15–16.
confirmation and scheduling errors.\footnote{See, e.g., INGAA Comments at 8.} Given the support for the revised NAESB schedule and the problems created in moving the time any later, the concerns of the commenters with the coordination of the current scheduling processes of MISO and SPP relative to natural gas scheduling are best addressed in the section 206 proceedings the Commission instituted for each ISO and RTO.

C. Intraday Nomination Cycles

Intraday Nomination Cycles

89. 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 Intraday 1 and Intraday 2 Nomination Cycles. The current Intraday 1 Nomination Cycle begins at 10:00 a.m. CCT on the day of gas flow, with pipelines issuing scheduled quantities at 2:00 p.m. CCT, and the start of gas flow at 5:00 p.m. CCT. The current Intraday 2 Nomination Cycle begins at 5:00 p.m. CCT on the day of gas flow, with pipelines issuing scheduled quantities at 9:00 p.m. CCT, and gas flow also starting at 9:00 p.m. CCT. As with nominations made at the Timely or Evening Nomination Cycles, nominations for firm service at the Intraday 1 Nomination Cycle can “bump” an already scheduled interruptible nomination. Pursuant to the “No-Bump Rule,” however, nominations for firm service made at the Intraday 2 cycle cannot “bump” previously scheduled interruptible service.

90. A number of commenters in response to the technical conferences in Docket No. AD12–12–000 stated that the standard, nation-wide nomination opportunities 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.\footnote{NOPR, 146 FERC ¶ 61,201 at P 57.} These commenters requested that the Commission require additional, standardized intraday nomination opportunities on interstate natural gas pipelines. Pipelines and other gas market participants indicated that they were open to the creation of the additional standard nomination cycles.\footnote{Id. P 62.}

1. NOPR Proposal

91. 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 NOPR proposed to modify the current natural gas nomination timeline to add two additional intraday nomination cycles. Intraday nominations, as well as provide firm shippers an additional, bumpable late-afternoon nomination cycle. The proposed revisions would 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.\footnote{A comparison of the current NAESB nomination timeline and the revised NAESB nomination timeline is set forth in the Appendix.}

92. The timelines proposed in the NOPR were based on the proposed adoption of 4:00 a.m. CCT as the start of the Gas Day. The NOPR proposed that the Intraday 1 Nomination Cycle begin at 8:00 a.m. CCT, with pipelines issuing scheduled quantities at 11:00 a.m. CCT, and gas flow beginning at 12:00 noon CCT. The Intraday 1 Nomination Cycle would provide an early morning opportunity for shippers to nominate gas. The NOPR proposed that the Intraday 2 Nomination Cycle begin at 10:30 a.m. CCT, with pipelines issuing scheduled quantities at 2:00 p.m. CCT, and gas flow beginning at 4:00 p.m. CCT. The NOPR proposed Intraday 2 cycle would replace the current Intraday 1 mid-morning nomination cycle and permit bumping. The NOPR proposed Intraday 3 Nomination Cycle would begin at 4:00 p.m. CCT with pipelines issuing scheduled quantities at 6:00 p.m. CCT, and gas flow beginning at 7:00 p.m. CCT. The NOPR proposed Intraday 3 Nomination Cycle would provide an additional bumping opportunity for firm shippers. The NOPR proposed Intraday 4 Nomination Cycle would begin at 7:00 p.m. CCT with pipelines issuing scheduled quantities at 9:00 p.m. CCT, and gas flow beginning at 9:00 p.m. CCT. The NOPR Intraday 4 Nomination Cycle would replace the current 5:00 p.m. no-bump cycle.

2. NAESB’s Revised Intraday Nomination Cycles

93. NAESB’s revised standards provide for three intraday nomination opportunities, rather than the four proposed in the NOPR. In contrast to the NOPR proposal to start the Intraday 1 Nomination Cycle at 8:00 a.m. CCT, NAESB’s revised standards start the Intraday 1 Nomination Cycle at the existing 10:00 a.m. CCT time. However, the revised standards move the deadline for pipelines to issue scheduled quantities up to 1:00 p.m. CCT from the existing NAESB standard of 2:00 p.m., and for gas flow to begin at 2:00 p.m. CCT, rather than the existing 5:00 p.m. CCT. NAESB’s revised standards provide for the Intraday 2 Nomination Cycle to start at 2:30 p.m. CCT, rather than 5:00 p.m., as it now does. Pipelines would issue scheduled quantities at 5:30 p.m. CCT, rather than the existing 9:00 p.m., and gas flow would begin at 6:00 p.m. CCT, instead of the existing 9:00 p.m. NAESB’s new Intraday 3 Nomination Cycle begins at 7:00 p.m. CCT, with scheduled quantities issued at 10:00 p.m. CCT, and gas flow beginning at 10:00 p.m. CCT. NAESB’s revised standards provide that bumping of interruptible service will be allowed during the Intraday 2 Nomination Cycle in addition to the Intraday 1 Nomination Cycle.\footnote{Id. P 62.} NAESB’s revised standards reflect reduced intraday processing times from the current NAESB standards (i.e., 3 hours instead of the current 4 hours). A comparison of the current NAESB intraday nomination timeline and the revised NAESB intraday nomination timeline is shown in the table below.

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<thead>
<tr>
<th>TABLE 8—I NTRADAY NOMINATION CYCLES</th>
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<tr>
<td><strong>Intraday 1</strong></td>
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<tr>
<td>Nomination Deadline</td>
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<tr>
<td>Schedule Issued</td>
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<tr>
<td>Start of Gas Flow</td>
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<td>IT Bump Rights</td>
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3. Comments

94. The large majority of comments on this issue support or do not oppose NAESB’s revised standards providing for three Intraday Nomination Cycles. Commenters state that, consistent with the NOPR’s proposed four intraday nomination cycles, NAESB’s modified three intraday nomination cycles will allow gas-fired generators, as well as other pipeline customers, more flexibility to respond to scheduling, operational, or weather-related changes throughout the operating day.156

95. Many commenters state that they do not support an additional fourth intraday nomination cycle, as proposed in the NOPR, arguing it would likely result in increased costs and overlapping cycles.157 For example, Dominion states that a fourth intraday cycle may require a third shift of employees, which will increase costs for pipelines.158

96. Many commenters state that NAESB’s three intraday nomination cycles resolve gas industry participants’ concerns with the NOPR’s proposed four intraday nomination cycles regarding overlapping cycles, which, left unresolved, could lead to greater instances of incorrect shipper nominations and scheduling errors. Commenters highlight several examples of overlapping cycles under the NOPR’s proposed four intraday nomination cycles. First, commenters state that the start of the NOPR’s proposed Evening Nomination Cycle is at 6:00 p.m. CCT, which would be the same time scheduled quantities are posted for the Intraday 3 Nomination Cycle. Commenters state that this would require a shipper to analyze how much of its gas the pipeline scheduled to flow for the remainder of the current Gas Day at the same time it must nominate in the Evening Nomination Cycle for gas flow the next day. Second, commenters state that the NOPR’s proposed 10:30 a.m. CCT start of the Intraday 2 Nomination Cycle would be before the 11:00 a.m. CCT posting of scheduled quantities for the Intraday 1 Nomination Cycle. Commenters state that under this timeline a customer would have to nominate gas in the Intraday 2 Nomination Cycle before learning what fraction of gas the pipeline scheduled in the Intraday 1 Nomination Cycle. Third, commenters state that the NOPR’s proposed 4:30 p.m. CCT posting of scheduled quantities for the Timely Nomination Cycle overlaps with the 4:00 p.m. start of the Intraday 3 Nomination Cycle, which would require pipelines to schedule gas for two different cycles at the same time. Commenters also point out that NAESB’s three intraday nomination cycles, like its revised Timely Nomination Cycle, reflect a shortened processing time (i.e., 3 hours instead of 4 hours). Commenters in the natural gas industry claim that these processing times cannot be shortened any further.160

97. Many commenters state that NAESB’s three intraday nomination cycles, unlike that of the NOPR’s proposed four intraday nomination cycles, provide sufficient time (1.5 hours) between the scheduled quantity posting of one cycle and the nomination deadline for the next cycle, so that shippers can review their pipeline transportation needs prior to the next nomination deadline.161 Under the NOPR’s proposed four intraday nomination cycles, the 10:30 a.m. start of the Intraday 2 Nomination Cycle is before the 11:00 a.m. posting of scheduled quantities for the Intraday 1 Nomination Cycle and there is only 1 hour between the time the schedules are posted for the Intraday 3 Nomination Cycle (6:00 p.m.) and the start of the Intraday 4 Nomination Cycle (7:00 p.m.). Many commenters also point out that NAESB’s nomination timeline, in particular the three intraday nomination cycles, allows for the accomplishment of most scheduling work during regular business hours, or as close as possible to regular hours.162

98. AGA, Dominion, and INGAA submit that NAESB’s three intraday nomination cycles, in particular the Intraday 2 and Intraday 3 Nomination Cycles, will also address the Commission’s concern regarding gas-
fired generators’ ability to ensure adequate gas supplies for the morning electric ramp by providing sufficient opportunities during the operating day to schedule gas to cover that morning period.  

99. ACES, AEP, Essential Power, and IRC support the four intraday nomination cycles proposed in the NOPR, rather than the three provided by NAESB’s revised standards. They state that more standardized opportunities for electric generators to nominate gas would provide generators additional operational flexibility to respond to real-time electric system needs.

100. While Exelon supports NAESB’s proposed three intraday nomination cycles, it cautions that, if the start of the Gas Day remains at 9:00 a.m. CCT, non-bumpable interruptible shippers will preempt the rights of firm shippers for almost half of the Gas Day, or 11 hours. Con Edison point out that, if the start of the Gas Day remains at 9:00 a.m. CCT, NAESB’s last bumpable intraday cycle (2:30 p.m. CCT) would be more than 18 hours before the current start of next Gas Day. Con Edison states that electric system conditions and load can change dramatically during an 18-hour period. Similarly, DSPS states that NAESB’s three intraday nomination cycles makes sense from the perspective of a utility that operates in the Eastern-time zone, but notes that utilities, such as those in the Desert Southwest, that do not have a late afternoon nomination cycle effectively have no tools to ensure the reliability of their natural gas transportation during the last 18.5 hours of the Gas Day, assuming a 9:00 a.m. CCT start to the Gas Day.

101. EDF et al. does not support NAESB’s addition of a single intraday cycle. EDF et al. urges the Commission to standardize the voluntary enhanced practices of certain pipelines and establish up to twelve intraday nominating and gas capacity trading (capacity release) cycles.

102. TVA, DSPS, Southern Star, Southern Company, and Michigan PSC encourage the Commission to consider modifying or eliminating the No-Bump Rule. TVA asserts that firm shippers paying demand charges under long-term firm contracts should always have priority, as firm capacity is charged and paid for the entire twenty-four hours of the Gas Day. DSPS states that the No-Bump Rule precludes a firm shipper from calling upon the unutilized portion of its firm contract to satisfy the evening peak demands if the capacity already has been nominated by and confirmed to an interruptible shipper.

103. Many commenters argue that the last intraday grid-wide nomination cycle should remain a no-bump cycle, as provided by NAESB’s revised standards. Commenters note that retaining the no-bump cycle was strongly supported in the NAESB process. The Enhanced Reliability Coalition states that no-bump plays an important role in balancing the flexibility needs for interruptible transmission shippers with available capacity while providing priority to firm shippers (who incurred the firm shipping costs) over interruptible shippers through the NAESB Intraday 2 Nomination Cycle.

4. Commission Determination

104. The Commission is amending its regulations at Part 284 to incorporate reference NAESB’s revised standards, which provide three intraday nomination cycles. Adoption of these standards will provide natural gas-fired generators, as well as other pipeline shippers, with increased scheduling flexibility. While the Intraday 1 Nomination Cycle will continue to start at 10:00 a.m. CCT, pipelines will issue scheduled quantities at 5:30 p.m. CCT, one hour earlier than under the currently effective standards, and gas flow will begin at 2:00 p.m. CCT, three hours earlier than under the currently effective standards. The new bumpable Intraday 2 Nomination Cycle will start at 2:30 p.m. CCT, four and a half hours after the single bumpable intraday nomination opportunity provided by the existing Intraday 1 Nomination Cycle, with pipelines issuing scheduled quantities at 5:30 p.m. CCT, and gas flow beginning at 6:00 p.m. CCT. By adding an additional bumpable nomination cycle later in the day, firm shippers will have greater opportunity to utilize the intraday schedules to reflect load and weather changes consistent with the higher priority of their service. The later time for the bumpable nomination will help shippers in the west, in particular, by allowing them to reflect later changes in weather forecasts into their nominations. The new no-bump Intraday 3 Nomination Cycle will start at 7:00 p.m. CCT, two hours later than the current no-bump Intraday 2 Nomination Cycle, with gas flow beginning at 10:00 p.m. CCT, one hour later than under the current no-bump Intraday 2 Nomination Cycle. The later no-bump nomination cycle will give shippers a further opportunity to adjust their nominations consistent with their needs, while also providing certainty to interruptible transactions, so shippers and pipelines can plan for flows during the Gas Day.

105. These revised standards reflect a consensus of the natural gas industry, and the changes reflect broad support in both industries. The vast majority of the commenters prefer NAESB’s proposed three intraday nomination cycles to the NOPR’s proposed four intraday nomination cycles because the NAESB proposal allows sufficient time for processing gas nominations, avoids overlapping nomination cycles, and allows for the accomplishment of most scheduling work during regular business hours, or reasonably close thereto. Further, they meet the goals of the NOPR because they provide additional flexibility to gas-fired generators, as well as other pipeline shippers. While some would prefer further changes to address their individual or regional needs, we find that, on balance, these standards represent a step forward that will benefit all shippers. We also note that under Commission policy, pipelines may file enhanced services that provide additional scheduling flexibility for firm shippers by adding additional nomination cycles that allow firm shippers to bump interruptible shippers.

163 See, e.g., AGA Comments at 23; Dominion Comments at 9–10; INGAA Comments at 6–7
164 ACES Comments at 9; AEP Comments at 4; Essential Power Comments at 4; IRC Comments at 4. IRC notes that CAISO would support three intraday gas nomination cycles irrespective of an earlier start of the Gas Day.
165 Exelon Comments at 10–11.
166 Con Edison Comments at 10.
167 DSPS Comments at 19–20.
168 EDF et al. Comments at 12.
169 TVA Comments at 3.
170 DSPS Comments at 20.
171 See, e.g., Dominion Comments at 10; Enhanced Reliability Coalition Comments at 31; EPRA comments at 3; IRAA Comments at 4; National Grid Comments at 30; NGSA Comments at 18–19; WBI Comments at 5; PGC Comments at 5–6; Seguent Comments at 6.
172 Enhanced Reliability Coalition Comments at 31.
173 As clarified in the NOPR, pipelines may offer enhanced nomination opportunities that permit bumping of interruptible shippers at least until the time the bumping notice under the modified NAESB Intraday 2 Nomination schedule is issued at 5:30 p.m. CCT. NOPR, 146 FERC ¶ 61,201 at P 73. The modified NAESB Intraday 3 Nomination Cycle guarantees that any bumped interruptible shipper will have an opportunity to renominate its bumped volumes at 7:00 p.m. CCT. If a pipeline proposes enhanced nomination services that permit bumping of interruptible services after 5:30 p.m. CCT, the Commission will consider the proposal on
106. Some commenters suggest that because firm service has a higher priority than interruptible service, firm shippers should always be able to bump interruptible service, and more generally, that all nomination cycles should be bumpy. We find sufficient support for retaining a no-bump cycle and respecting the gas industry consensus that was achieved.\(^\text{177}\) As several commenters maintain, 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.\(^\text{178}\) Moving the last bump cycle to later in the day helps to accommodate the needs of the firm shippers, while maintaining the No-Bump Rule during NAESB’s Intraday 3 Nomination Cycle will provide stability for interruptible shippers. As such, we find that it achieves a reasonable balance of interests.

107. While NAESB’s modified standards represent an improvement over the currently effective standards, we continue to recognize that additional intraday nomination opportunities could promote more efficient use of existing pipeline infrastructure and provide additional operational flexibility to all pipeline shippers, including gas-fired generators. The modified NAESB standards reflect reduced intraday processing times from the current NAESB standards (i.e., three hours instead of the current four hours), and existing operational limitations, including the manual processes utilized by pipelines for processing nominations, may affect the ability of the gas industry to add additional standard nomination cycles applicable to all shippers. However, the use of computerized scheduling would appear to provide an opportunity for faster and more frequent scheduling of intraday nominations for those shippers and their confirming parties willing to commit to scheduling electronically. We request that gas and electric industries, through NAESB, explore the potential for faster, computerized scheduling when shippers and confirming parties submit electronic nominations and confirmations, including a streamlined confirmation process if necessary. Providing such an option would enable those entities that need greater scheduling flexibility to have their requests processed expeditiously.

V. DSPS Proposal

A. Background

108. In its proposal, DSPS asserts that the fundamental issue in the Desert Southwest is that firm transportation shippers do not have the necessary tools to access their firm transportation capacity in order to properly respond to operating contingencies, including unexpected changes in renewable generation, that occur during their evening peak demand period. DSPS suggests that three Commission policies preclude firm shippers in the Desert Southwest from accessing their transportation capacity during their evening peak demand period. First, DSPS states that the intraday nomination cycles do not align with the evening peak periods of demand in the Desert Southwest which occur between 7:00 p.m. and 9:00 p.m. CCT. Second, DSPS states that the rule that interruptible service cannot be bumped in the last intraday nomination cycle precludes firm transportation shippers from accessing their transportation capacity during the evening peak period if an interruptible shipper is already flowing gas on the system. Finally, DSPS states that the Commission’s rule that, once scheduled, secondary firm service cannot be bumped in any subsequent nomination cycle,\(^\text{177}\) also interferes with the ability of firm shippers to schedule primary-firm service after the Timely Nomination Cycle. DSPS states that it is concerned that some shippers are contracting for primary firm transportation rights on unused pipeline paths and then scheduling secondary firm service on a more heavily used path outside their primary path in the Timely or Evening Nomination Cycles. DSPS states that this blocks shippers holding primary firm rights to the more heavily used path, including DSPS members, from using their primary firm service in subsequent nomination cycles.

109. DSPS notes that geographical factors also present unique challenges in the Desert Southwest. DSPS indicates that the Desert Southwest does not have local market area gas storage which makes it difficult to respond to unexpected changes in demand. Further, DSPS contends that the Desert Southwest is the home of a growing percentage of renewable energy resources. DSPS claims that electric utilities require both the transportation capacity and the natural gas commodity be available to respond to the immediate generation demands caused by the drop in renewable energy.

110. Accordingly, DSPS proposes changes on a national basis and on a regional basis, as discussed below.

B. DSPS’s Proposed National Changes

111. On a national basis, DSPS requests that the Commission: (1) Start the Evening Nomination Cycle at 7:00 p.m. CCT (instead of 6:00 p.m. CCT, as in both the NOPR and NAESB’s revised standards); and (2) modify the Commission’s policy on natural gas scheduling priority to allow primary-firm shippers to bump secondary firm shippers during the Evening Nomination Cycle. DSPS contends that moving the Evening Nomination Cycle to 7:00 p.m. CCT provides a timely opportunity to address operating contingencies. DSPS also contends that, unlike the alternative of establishing a bumptable 7:00 p.m. CCT intraday nomination cycle, this proposal dispenses with the concerns surrounding interrupting flowing gas, the need for a subsequent no-bump cycle, and the fact such a late intraday nomination cycle would have little value due to the elapsed pro-rata flow of the gas. DSPS asserts that its proposal to modify the Commission’s policy on secondary firm nominations would increase the value of firm contracts involving primary points and encourage long-term contracting, which in turn promotes infrastructure development.

1. Comments

112. In its October 15, 2014 notice, the Commission specifically sought comment on the DSPS proposals. None of the commenters on DSPS’s proposal support DSPS’s proposal to change the Evening Nomination Cycle from 6:00
p.m. to 7:00 p.m. CCT. While most commenters oppose modifying Commission policy to permit primary-firm nominations to bump secondary firm nominations in the Evening Nomination Cycle, a few commenters support this proposal.

113. Many of those commenters opposing the DSPS proposal to change the Evening Nomination Cycle contend that the change is contrary to the NAESB efforts to establish a coordinated nomination and scheduling timeline. PGC states that during the NAESB discussion and voting process, a 7:00 p.m. CCT Evening Nomination Cycle was thoroughly vetted and ultimately rejected by a majority of the industry participants. Other commenters state that the proposed time would coincide with the start of the NAESB Intraday 3 Nomination Cycle. Several commenters also state that DSPS has not sufficiently explained why its proposed 7:00 p.m. Evening Nomination Cycle would address its concerns about operating contingencies occurring in the late afternoon of a Gas Day as nominations made during the Evening Nomination Cycle are for gas flow on the following Gas Day.

114. With respect to DSPS’s proposal to change the scheduling priority of secondary firm/alternate nominations in the Evening Nomination Cycle, NGSA and PGC contend the DSPS proposal would de-value secondary firm service and AGA argues that the DSPS proposal would adversely affect gas customers by reducing revenues from secondary market sales that are used to mitigate the costs of holding firm capacity.

115. Several pipelines state that the proposal to allow primary-firm nominations to bump secondary firm nominations in the Evening Nomination Cycle would also negatively affect pipeline operations. INGAA states that pipeline operators need sufficient time after scheduling nominations, based on priority, to set up the pipeline system for the next Gas Day. INGAA contends that the adoption of the DSPS’s proposal effectively would shift this work from the period following the Timely Nomination Cycle to the period following the Evening Nomination Cycle because firm shippers will have little or no reason to submit primary firm nominations prior to the Evening Nomination Cycle. WBI and INGAA further note that the DSPS proposal would move the major confirmation and scheduling period outside of normal business hours, making it more difficult for a pipeline operator to confirm a shipper’s nomination with receipt and delivery point operators, producers and shippers.

116. Similarly, PGC and INGAA assert that delaying the posting of scheduled quantities until 10:00 p.m. CCT would cause uncertainty among firm shippers until after business hours, when few suppliers are staffed sufficiently to reroute or resell gas and the commodity market is not liquid, to learn whether the shipper’s gas was scheduled to flow the next Gas Day or be bumped. Kinder Morgan notes that NAESB has recently developed capacity release standards (in conjunction with moving the Timely Nomination Cycle back to 1:00 p.m.) that will allow shippers to acquire released capacity in time to be nominated in the Timely Nominated Cycle. Kinder Morgan states that the DSPS proposal would negate the benefit of this enhancement.

118. Southern Company supports allowing primary-firm nominations to bump secondary firm nominations in the Evening Nomination Cycle. Southern Company suggests that a critical component of its plans for providing reliable, cost-effective electricity supply to customers calls for the maintenance of firm gas transportation and storage capacity to serve its gas-fired generators. Southern Company suggests that the value of holding firm transportation service to serve gas-fired generators is undermined, however, when an electric generator attempts to react to changes in demand only to find its contracted firm transportation capacity unavailable as a result of other shippers’ prior, secondary firm nominations. Southern Company believes the current policy sends the wrong signal to market participants who might otherwise choose to invest in firm service if they could be confident of their rights to exercise it as needed.

119. Along the same lines, TVA argues that secondary out-of-path service should have no higher priority than interruptible transportation. TVA states that its access to its firm, in-path capacity is being jeopardized by shippers contracting for firm transportation on pipeline paths that do not deliver to their markets and subsequently nominating secondary firm transportation outside their primary path on a perpetual basis. This practice limits primary firm shippers’ ability to utilize their capacity after the Timely Nomination Cycle. TVA states that capacity is only built to support the primary path of firm transportation contracts and will not materialize when a shipper contracts for a specified firm transportation path, but chooses to nominate and flow on an entirely unrelated path.

120. Many commenters support consideration of the DSPS proposal on a regional basis by individual pipelines. Transwestern states that the proposal is workable and has been adopted on other pipelines.

2. Commission Determination

121. The Commission declines to adopt DSPS’ proposal to move the Evening Nomination Cycle to 7:00 p.m. CCT or to modify the Commission’s policy on natural gas scheduling priority to require all pipelines to permit primary firm nominations to bump secondary firm nominations in the Evening Nomination Cycle. With respect to the proposed change to the Evening Nomination Cycle, DSPS fails to make clear how moving the start time of the Evening Nomination Cycle one hour later to 7:00 p.m. CCT provides shippers in its region with a more timely opportunity to address operating contingencies that arise fourteen hours later during the Gas Day. Starting the Evening Nomination Cycle at 7:00 p.m. CCT does not appear to address DSPS’s concerns with demand fluctuations, given that the Evening Nomination Cycle is for gas scheduled to flow the next Gas Day, not the current Gas Day. Also, under DSPS’ proposal, the Evening Nomination Cycle would occur at the same time as

182 See, e.g., Dominion Comments at 13; Enhanced Reliability Coalition Comments at 32–33; Sequent Comments at 8; INGAA Comments at 9–10; IPAA Reliability Coalition Comments at 32–33; EPSA Dominion Comments at 12–13; Enhanced Gas Transportation Coalition Comments at 31–32; Sequent Comments at 6; NGSA Comments at 23; PGC Comments at 10.

183 ACES Comments at 13; AGA Comments at 33; Dominion Comments at 12–13; Enhanced Reliability Coalition Comments at 32–33; EPSA Comments at 8; INGAA Comments at 9–10; IPAA Comments at 3; Kinder Morgan Comments at 10; National Grid Comments at 5; New England LDCs Comments at 32; Natural Gas Council Comments at 6; NGSA Comments at 22; PGC Comments at 8; Sequent Comments at 6; Southwest IS Comments at 2–3; Transwestern Comments at 4; WBI Energy Comments at 7.

184 PGC Comments at 9.

185 See, e.g., AGA Comments at 33; BHE Comments at 6–7; Dominion Comments at 12–13.

186 See, e.g., Dominion Comments at 12–13; PGC Comments at 9; Southwest IS Comments at 6.

187 NGSA Comments at 23; PGC Comments at 10.

188 AGA Comments at 34.

AGA Comments at 33; Dominion Comments at 12–13; Enhanced Reliability Coalition Comments at 32–33; EPSA Comments at 8; INGAA Comments at 9–10; IPAA Comments at 3; Kinder Morgan Comments at 10; National Grid Comments at 5; New England LDCs Comments at 32; Natural Gas Council Comments at 6; NGSA Comments at 22; PGC Comments at 8; Sequent Comments at 6; Southwest IS Comments at 2–3; Transwestern Comments at 4; WBI Energy Comments at 7.
NAESB’s Intraday 3 Nomination Cycle. Given the wide support for the revised NAESB Evening Nomination Cycle and the largely unexplained benefits of moving the Evening Nomination Cycle later, we find that making such a change to the Evening Nomination Cycle is unwarranted.

123. Regarding modifying Commission policy to require all pipelines to permit primary firm nominations to bump scheduled secondary firm service in the Evening Nomination Cycle, the Commission finds that the benefits of that proposal do not outweigh the burdens that would be placed on all interstate pipelines and secondary firm shippers as a result of such proposal. Based on the comments, allowing primary firm to bump secondary firm would move the major confirmation and scheduling period outside of normal business hours, making it more difficult for a pipeline operator to confirm a shipper’s nomination with point operators, producers and shippers. It could also disrupt the liquid secondary market for capacity by reducing the value of obtaining released capacity. For these reasons, the Commission declines to adopt this proposal on a national basis.

C. 1-Year Pilot Program

124. DSPS also requests that Commission require, on a 1-year pilot program basis, the pipelines serving the Desert Southwest (i.e., El Paso Natural Gas, Transwestern and TransCanada-North Baja Pipelines) to allow firm shippers experiencing an unexpected increase in demand during the evening of the current Gas Day to submit a separate “retro/make-up” nomination during the Evening Nomination Cycle that would not take effect until the start of the next Gas Day but would make up for the unscheduled service they take during the current Gas Day. DSPS also proposes that the Pilot Program: (a) Provide that imbalance charges/penalties only apply to imbalances that are not corrected by gas that flows at the start of the Gas Day; and (b) prohibit shippers from submitting a combination of a retro/make-up nomination and a daily nomination that exceeds the shipper’s Maximum Daily Quantity of its firm contract. DSPS states that, by allowing a retro/make-up nomination to be submitted in the Evening Nomination Cycle, the firm shipper would be ensuring that the gas it uses to address the operating contingency would be injected into the pipeline beginning at the start of the next Gas Day.

125. Kinder Morgan states that its pipelines that serve the DSPS stakeholders have been engaged in discussions with DSPS regarding their unique issues. Kinder Morgan states that the regional needs of the DSPS are best addressed on a pipeline-specific basis. Kinder Morgan also notes that El Paso has previously added additional nomination intraday cycles and offers various types of hourly services. KINDER MORGAN COMMENTS at 5.

2. Commission Determination

127. As noted elsewhere in this Final Rule, regional solutions may work best to address certain needs arising from increased use of natural gas. While the Commission will not require the pipelines serving the Desert Southwest (i.e., El Paso Natural Gas, Transwestern and TransCanada-North Baja Pipelines) to implement DSPS’s proposed 1-year pilot program, we encourage continued discussion in the region. The record here is insufficient for the Commission to require the pipelines to institute DSPS’ requested pilot program of make-up nominations. The comments of the pipelines affected by this proposal indicate that they are uncertain of the operational feasibility of instituting a make-up nomination, but are interested in discussing this issue further with the DSPS shippers. Given the comments, we lack any evidence that requiring these pipelines to offer make-up nominations during the Evening Nomination Cycle is operationally feasible for all the pipelines. However, one or more pipelines appear willing to discuss potential service offerings that may help Desert Southwest shippers and we encourage those discussions to proceed.

VI. Multi-Party Transportation Contracts

A. Background

128. 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 ensure that such capacity transfers are transparent and not unduly discriminatory. Utilizing capacity release to effectuate sharing of capacity between entities can make 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. As approved by the Commission, this option permits several shippers to share the subject capacity without the need to use the capacity

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. ¶ 30,930, at 30,416–20, Order on reh’g, Order No. 636, FERC ¶ 61,284 (2009), order on compliance filing, Docket No. RP09–922–001 (Nov. 17, 2009) (delegated letter order) (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 FT to allow a single contract option for multiple shippers that have designated a single agent on their behalf); Interstate Natural Gas Transportation Services, Order No. 637, FERC Stats. & Regs. ¶ 31,091, at 31,300 (2000).

Southern Natural Gas Co., 124 FERC ¶ 61,145 (2008) (Southern) (pipeline modified Rate Schedule FT to allow a single contract option for multiple shippers affiliated with a single agent or asset manager); Tennessee Gas Pipeline Co., LLC, 142 FERC ¶ 61,200 (2013) (Tennessee) (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).
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 shipper under a multi-party transportation contract agree to be jointly and severally liable for all obligations of all shippers and the agent under the single service agreement. The Commission has permitted multi-party transactions even when the shippers under such an agreement are not affiliated with one another.

129. 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. Under this single transportation service agreement, on any given day Southern Company Services can use up to its overall contractual entitlement under the service agreement to provide service to any one of its affiliated utilities.

B. NOPR Proposal

130. The NOPR proposed to revise Part 284 of the Commission’s regulations to require interstate natural gas pipeline operators to 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 previously approved, the NOPR stated that 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.

131. As explained in the NOPR, 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 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.

132. The Commission’s NOPR proposal would only require pipelines to offer multi-party service agreements for firm service because a primary benefit of such service agreements is that they permit entities to share firm capacity without the need to engage in capacity releases. However, in recognition of the fact that some pipelines currently offer multi-party service agreements to interruptible customers as well, the Commission requested comment on whether it should also require pipelines to offer multi-party service agreements for interruptible transportation service.

C. Comments

133. Ten commenters either support or do not oppose the NOPR proposal. They contend that the proposal will enable multiple shippers, including gas-fired generators, with greater flexibility and facilitate more efficient use of pipeline capacity.

134. Many commenters express varying degrees of qualified support for the NOPR proposal. AGA asserts that the concept could be valuable not just for gas-fired generators, but also for small producers as an alternative to interruptible transportation and a tool to help optimize capacity and ensure that they have a firm outlet for gas. Along with EnerVest, urges the Commission, however, to grant blanket waivers of the shipper-must-have-title policy in order to facilitate multi-party transportation agreements. Several commenters argue that the Commission should leave it to individual pipelines to propose such services in response to customer needs. INGAA states that even on pipelines that currently allow multi-party contracts, customer response has been limited. INGAA requests that the Commission either reconsider the addition of section 312(b)(1)(v) to the Commission’s regulations or modify the regulatory text to provide that:

"Within 60 days upon a shipper request, a pipeline will file to make appropriate tariff changes at the Commission 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."

135. AF&PA, IECA, NGSA, and PGC support the concept of making multi-party transportation contracts more widely available, provided that the Commission can ensure that multi-party contracts are transparent, do not adversely affect existing shippers, comply with all pipeline tariffs, and do not unduly discriminate against other shippers. Along those lines, AF&PA, IECA, and PGC urge the Commission to clarify that individual shippers must be publicly disclosed, not just the designated contract agent or asset manager under the multi-party transportation contract. AF&PA, IECA, and NGSA also suggest that the...
Commission should closely monitor and take action if increased utilization of multi-party contracts substantially reduces the competitiveness of the secondary market.207

136. Other commenters urge the Commission to require certain provisions that have already been approved in other proceedings involving multi-party transportation contracts (e.g., shippers and agents must demonstrate their agency relationship in writing).208 BHE supports the NOPR proposal, provided the affected interstate natural gas pipelines are adequately protected financially by way of creditworthiness terms and conditions.209

137. Several commenters who support the concept of multi-party transportation contracts, nevertheless request a number of clarifications regarding the terms and conditions of service for multi-party transportation contracts. MSCG urges the Commission to clarify scenarios involving liability, events of default, billing and payment, and shipper-must-have-title.210 NGSA requests several clarifications on confidentiality and the consolidation of existing agreements into a single multi-party transportation contract.211 Puget requests that the Commission clarify how capacity and costs are shared amongst the parties under a multi-party transportation agreement.212

138. Some commenters assert that the Commission should convene technical conferences or workshops or perform further evaluation to further explore some of the issues discussed above and other implementation issues before adopting the proposed regulation.213

139. Idaho Power, Sequent, and Tenaska oppose the NOPR proposal, arguing that multi-party transportation contracts will not offer any additional benefits to the reliability of gas supply to generators than the Commission’s current capacity release program or current pipeline service offerings.214 For example, Tenaska asserts that the NOPR’s proposal would carve out an exception to the capacity release rules for multi-party transportation contracts and would depart from the goals of the program, including those regarding transparency, allocation to the party that values the released capacity the most, and by allowing private groups to control a certain amount of capacity outside of the capacity release process.215 Tenaska also states that the NOPR proposal does not address whether or how any amount of the shared capacity, once under a multi-party transportation contract, can be re-released, or whether the designated agent or Asset Manager may use the capacity.

140. Sequent is concerned that the parties to a multi-party service agreement could receive preferential treatment or status over non-multi-party capacity bidders in terms of capacity allocation, posting and bidding rules (including those for affiliates), credit requirements, application of shipper-must-have-title policy, prohibition on buy-sell arrangements, tying and other capacity release requirements. Sequent also requests clarification regarding open seasons and the consolidation of existing transportation agreements into a single multi-party transportation contract.216

141. In response to the NOPR’s question regarding whether the Commission should require pipelines to offer multi-party interruptible contracts, AF&PA, Duke, EnerVest, NGSA, and PGC support or do not oppose offering multi-party transportation contracts for interruptible service.217 However, Dominion, INGAA, and Kinder Morgan argue against it.218 EnerVest argues that, in the case of affiliated capacity-sharing shippers, allowing a single affiliated agent or asset manager to interface with the pipeline in connection with interruptible transportation services would provide potential administrative benefits for both shippers and pipelines alike, and would contribute to greater efficiency in overall utilization of total interstate natural gas pipeline transportation capacity.219 To the contrary, INGAA argues that an interruptible transportation multi-party service agreement would not provide generators with any additional ability to offset the costs of holding an interruptible transportation contract, since there are none, and would not provide any additional incentives for generators to enter into an interruptible transportation agreement, since that incentive is there already.220 Dominion makes similar arguments.221

D. Commission Determination

142. In this Final Rule, the Commission adopts section 284.12(b)(1)(iiii) as proposed in the NOPR, with the modification requested by INGAA. Instead of requiring all interstate pipelines at this time to modify their tariffs to offer multi-party firm transportation contracts, the Commission will only require pipelines to offer such an option if requested to do so by a shipper. Specifically, section 284.12(b)(1)(iiii) as adopted in this Final Rule, requires that within 60 days of a shipper request, a pipeline must file to make appropriate tariff changes 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.

143. As noted by many commenters, the availability of multi-party firm transportation contracts will provide shippers, including gas-fired generators, with greater flexibility and facilitate more efficient use of pipeline capacity. In addition, section 284.12(b)(1)(iiii) as adopted ensures that pipelines are responsive to shipper requests when, and if, a shipper is interested in pursuing a multi-party transportation agreement, while not requiring pipelines to implement tariff provisions offering that option where there is no shipper interest. Postponing implementation in this regard would not appear to unduly delay use of multi-party transportation contracts by interested shippers given the time necessarily involved in finalizing a multi-party arrangement.

144. Upon an individual pipeline’s filing to implement multi-party transportation contracts, customers and other interested persons will have the opportunity to raise any concerns regarding the pipeline’s filing, including any accompanying terms and conditions proposed by the individual pipeline. Commenters who have raised questions or requested clarifications in this proceeding regarding accompanying terms and conditions, such as creditworthiness, capacity release, open seasons, existing agreements, events of default, liability, and billing and payment, will have the opportunity to seek such clarifications in the individual pipeline proceedings, thereby giving the individual pipeline

207 AF&PA Comments at 3–5; IECA Comments at 2–4; NGSA Comments at 24–26.
208 See, e.g., INGAA Comments at 32–33; Kinder Morgan Comments at 15; Spectra Comments at 9.
209 BHE Comments at 18.
210 MSCG Comments at 18–19.
211 NGSA Comments at 26.
212 Puget Comments at 31–32.
213 Dominion Comments at 28–29; ENE Comments at 5–6; Exelon Comments at 12; Puget Comments at 32; Sequent Comments at 9–10; Southern Comments at 13–14.
214 Idaho Power Comments at 2; Sequent Comments at 8; Tenaska Comments at 5.
215 Tenaska Comments at 6–7.
216 Sequent Comments at 9.
217 AF&PA Comments at 5; Duke Comments at 5; EnerVest Comments at 9; NGSA Comments at 26; PGC Comments at 7 & c.
218 Dominion Comments at 29; INGAA Comments at 13–34; Kinder Morgan Comments at 16.
219 EnerVest Comments at 9.
220 INGAA Comments at 33–34.
221 Dominion Comments at 29.
the first opportunity to address any such concerns.

145. Tenaska and other commenters raise concerns regarding transparency and the impact of the multi-party transportation contracts on the capacity release market. In recent years, 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.\textsuperscript{222} The Commission has received no indication of any problems surrounding such multi-party transportation contracts or of a negative impact on the capacity release market resulting from such contracts. Furthermore, as INGAA notes, customer use of such contracts has been limited.\textsuperscript{223} There are also safeguards in the use of such contracts has been limited.\textsuperscript{223} There are also safeguards in

Furthermore, as INGAA notes, customer use of such contracts has been limited.\textsuperscript{223} There are also safeguards in


226 1 CFR 51.5 (2014).


152. NAESB is a private consensus standards developer that develops voluntary wholesale and retail standards related to the energy industry. The procedures utilized by NAESB make its standards reasonably available to those affected by the Commission regulations. Participants can join NAESB, for an annual membership cost of only $7,000, which entitles them to full participation in NAESB and enables them to obtain these standards at no cost. Non-members may obtain the Individual Standards Manual or Booklets for each standard by email for $250 per manual or booklet, which in the case of these standards would total $1,000. Nonmembers also may obtain the complete set of Standards Manuals, Booklets, and Contracts on CD for $2,000. NAESB also provides a free electronic read-only version of the standards for a three business day period or, in the case of a regulatory comment period, through the end of the comment period. In addition, NAESB considers requests for waivers of the charges on a case by case basis depending on need. The parties affected by these Commission regulations are highly sophisticated and have the means to acquire the information they need to effectively participate in Commission proceedings.

IX. Information Collection Statement

153. The collections of information for this Final 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 and OMB’s implementing regulations. OMB must approve information collection requirements imposed by agency rules. The burden estimates for this Final Rule are for one-time implementation of the information collection requirements of this Final Rule (including tariff filing, documentation of the process and procedures, and IT work), and ongoing burden.

154. The Commission solicits comments from the public on the Commission’s need for this information, whether the information will have practical utility, the accuracy of the burden estimates, recommendations 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 implementing the information collection requirements of this Final Rule. The Commission asks that any revised burden estimates submitted by commenters include the details and assumptions used to generate the estimates.

155. The collections of information related to this Final Rule fall under FERC–545 (Gas Pipeline Rates: Rate Change (Non-Formal)) and FERC–549C (Standards for Business Practices of Interstate Natural Gas Pipelines). The following estimates of reporting burden are related only to this Final Rule and include the costs to pipelines: (1) Incorporate by reference NAESB’s modified nomination timeline, which includes: moving the start of the Timely Nomination Cycle from 11:30 a.m. to 1:00 p.m. CCT and adding an additional intraday nomination opportunity; and (2) require interstate pipelines to file tariff changes with the Commission allowing multiple shippers associated with a designated agent or asset manager to be jointly and several liable under a single firm transportation service agreement within 60 days of receiving a request from a shipper for a multi-party service agreement.

Public Reporting Burden:

<table>
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<th>RM14–2 Final Rule</th>
<th>Number of respondents</th>
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<th>Total annual cost ($)</th>
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<td>1</td>
<td>10</td>
<td>1,650</td>
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<tr>
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<td>1</td>
<td>10</td>
<td>80</td>
<td>5,646</td>
</tr>
</tbody>
</table>

| Tariff Filing for Multi-Party Service Agreements (one-time) | 242 |

235 FERC–545 covers rate change filings made by natural gas pipelines, including tariff changes. FERC–549C covers rate change filings made by Interstate Natural Gas Pipelines.
236 An estimated 165 natural gas pipelines (Part 284 program) are affected by this Rulemaking. Although the additional intraday nomination and the revised same-day and day-ahead trading schedules may affect electric plant operators, the Commission is not imposing the reporting burden of adopting these standards on those entities.
238 The average hourly burden cost (salary plus benefits) related to tariff filings is $70.58. This represents the average wage (salary and benefits) of the following occupational categories: "Lawyers" ($128.94 per hour, top 10 percent of wage earners), "Computer Systems Analyst" ($58.77 per hour, average composite hourly wage), and "Office and Administrative" ($24.04 per hour, average composite hourly wage). Wage data is available from the Bureau of Labor Statistics at http://www.bls.gov/oes/home.htm; estimate of the benefits component at http://www.bls.gov/news.release/ecere.tnt.htm.
239 A majority of the 165 potential respondents operate under tariffs filed with the Commission that include provisions for multi-party transportation contracts. The Commission expects that approximately 8 of the 165 potential respondents (five percent), following an expression of shipper interest, will file tariffs each year with the Commission that support multi-party transportation contracts.
### Information Collection Costs

The Commission estimates the total costs for all respondents to be:

- **Year 1** (including the one-time tariff-filing, implementation, and ongoing costs): $4,182,341.
- **Years 2 and 3**, each (ongoing costs only): $1,535,738.

| Title: FERC–545, Gas Pipeline Rates: Rate 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 (FERC–545) and 1902–0174 (FERC–549C). | 
| Respondents: Business or other for profit enterprise (Natural Gas Pipelines). | 
| Frequency of Responses: One-time filing and implementation and ongoing. | 

### Necessity of Information

This Final Rule will upgrade the Commission’s current business practice and communication standards and supports the availability of multi-party firm contracts for interested shippers. In incorporating by reference NAESB’s modified nomination timeline, including moving the start of the Timely Nomination Cycle from 11:30 a.m. to 1:00 p.m. CCT and adding an additional intraday nomination opportunity, the Commission intends to provide electric generators more time to acquire natural gas pipeline transportation, in order to reduce economic and resource supply constraints, additional flexibility to all shippers, allows sufficient time for processing, avoids overlapping nomination cycles, and allows for the accomplishment of most scheduling work during regular business hours, or reasonably close thereto.

157. Broad industry consensus across the natural gas and electric industries during the NAESB deliberations supports the implementation of multi-party firm transportation contracts. The Final Rule ensures that pipelines are responsive to shipper requests when, and if, a shipper is interested in pursuing a multi-party transportation contract. As such, this Final Rule does not require pipelines to implement tariff provisions offering a multi-party transportation contract option when there is no shipper interest.

### Internal Review

The Commission has reviewed the proposed business practice standards of natural gas pipelines and has determined that the proposed revisions are necessary to establish more efficient coordination between the natural gas and electric industries, and to provide additional flexibility for all natural gas pipeline shippers. 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.

159. 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, email: DataClearance@ferc.gov, phone: (202) 395–0710, fax: (202) 273–0873]. For security reasons, comments to OMB should be submitted by email to: oira_submission@omb.eop.gov. Comments submitted to OMB should include OMB Control Numbers 1902–0154 and 1902–0174.

### X. Environmental Analysis

161. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment. The Commission concludes that neither an Environmental Assessment nor an Environmental Impact Statement is required for this Final Rule under section 380(a) of the Commission’s

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243 The average hourly cost is $63.75. This represents the average wage (salary and benefits) of the following occupational categories: “Lawyers” ($128.94 per hour, top 10 percent of wage earners), “Computer Systems Analyst” ($58.77 per hour, average composite hourly wage), “Gas Plant Operator” ($43.24 per hour, average composite hourly wage), and “Office and Administrative” ($24.04 per hour, average composite hourly wage).

244 For ongoing operations, we estimate 0.5 hours per calendar day per respondent (or 162.5 hours annually per respondent).

XI. Regulatory Flexibility Act Certification

162. The Regulatory Flexibility Act of 1980 (RFA) generally requires a description and analysis of 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 matched to North American Industry Classification System Codes (NAICS). The SBA has established a size standard for pipelines transporting natural gas, stating that a firm is a small entity if its annual receipts (including those of its affiliates) are $27.5 million or less.

163. This Final Rule applies only to interstate natural gas pipelines. The Commission estimates that approximately 165 interstate pipeline entities are potential respondents subject to the data reporting requirements of FERC–545. For fiscal year 2013, the Commission estimates that 70 pipelines (42.4 percent of 165 potential respondents) not affiliated with larger companies had annual revenues less than $27.5 million or less and are defined by the SBA as “small entities.” The Commission anticipates that the estimated compliance cost of this Final Rule is $4,182,341 in Year 1 (an average of $25,348 per entity, including both one-time and ongoing costs), and $1,535,738 per year in Years 2 and 3 (an annual average of $9,308 per entity for ongoing cost), regardless of entity size. The Commission does not consider the estimated impact per company to be significant. Additionally, the incorporation by reference of the revised NAESB standards, which reflect broad support from both industries, helps ensure the reasonableness of these standards in this Final Rule. Pipelines will need to file new tariffs with the Commission only if a) they do not currently offer multi-party transportation contracts, and b) shippers request that the pipeline offer such contracts.

164. Accordingly, pursuant to Section 605(b) of the RFA, this Final Rule should not have a significant economic impact on a substantial number of small entities.

XII. Implementation Schedule

A. Comments

165. Many commenters state that, to the extent the Commission adopts any changes to the gas scheduling timeline in this proceeding, the Commission must allow a sufficient time for implementation. INGAA, Kinder Morgan, and WBI state that scheduling changes would require a minimum of nine months to implement. A number of commenters also state that it will be important to implement any scheduling changes adopted in this proceeding when natural gas demand is low. INGAA states that any transition should occur outside the winter heating season (November through March) or summer peak season (May through August). April or October was suggested by INGAA.

166. AGA, EEI and Calpine contend that implementation of the changes to the natural-gas system as ordered in the Final Rule should occur concurrently with the implementation of the changes to electric system as ordered in the forthcoming ISO and RTO filings pursuant to the Section 206 Order. INGAA notes that, while it will likely be able to respond to the Final Rule within the 90 day deadline if it can use the expedited NAESB Minor Correction Process, if the NAESB Standards Development Process is used to respond to the Final Rule it may be challenging to meet the deadline. NAESB states that under the latter process multiple industry and member review periods are required and past expedited efforts have not been completed in under 90 days.

B. Commission Determination

168. The Commission will require interstate natural gas pipelines to comply with the revised NAESB standards that we are incorporating by reference in this Final Rule beginning on April 1, 2016. We are requiring this implementation schedule to give the interstate natural gas pipelines subject to these standards adequate time to implement these changes. In addition, pipelines must file tariff records to reflect the changed standards by February 1, 2016. The changes included in this Final Rule should benefit all pipeline shippers, including gas-fired generators. Accordingly, we will not require that the changes included in this Final Rule be implemented simultaneously with any changes resulting from the 206 Proceeding.

169. In addition, consistent with the requirements in Order No. 587–V, the Commission is including the following compliance filing requirements to increase the transparency of the pipelines’ incorporation by reference of the NAESB WGQ Standards so that shippers and the Commission will know which tariff provision(s) implements each standard as well as the status of each standard.

(1) The pipelines must designate a single tariff section or tariff sheet(s) under which every NAESB standard is listed.

(2) For each standard, each pipeline must specify in the tariff section or tariff sheet(s) listing all the NAESB standards:
   (a) Whether the standard is incorporated by reference;
   (b) for those standards not incorporated by reference, the tariff provision that complies with the standard.

251 U.S.C. 605(b).

252 INGAA Comments at 34–35; Kinder Morgan Comments at 16–17; WBI Comments at 8–9.

253 See, e.g., Calpine Comments at 14, Exelon Comments at 12; WBI Comments at 8 (citing Section 206 Order, 146 FERC ¶ 61,202).

254 INGAA Comments at 35.

255 Calpine Comments at 17; EEI Comments at 7; NGSA Comments at 36.
XIII. Document Availability

172. 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, D.C. 20426.

173. 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.

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

XIV. Effective Date and Congressional Notification

175. This final rule is effective July 8, 2015. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of July 8, 2015. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a “major rule” as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996. This final rule is being submitted to the Senate, House, and Government Accountability Office.

List of Subjects in 18 CFR Part 284

Natural gas, Reporting and recordkeeping requirements, Incorporation by reference.

By the Commission.

Nathaniel J. Davis, Sr.,
Deputy Secretary.

In consideration of the foregoing, the Commission amends Part 284, Chapter I, Title 18, Code of Federal Regulations, as follows.

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

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


2. Amend §284.12 by revising paragraphs (a)(1)(vi) and (vii) and by adding paragraphs (a)(1)(viii) and (ix) and (b)(1)(iii) to read as follows:

§284.12 Standards for pipeline business operations and communications.

(a) * * *

(1) An interstate pipeline that transports gas under subparts B or G of this part must comply with the business practices and electronic communications standards as promulgated by the North American Energy Standards Board, as incorporated herein by reference in paragraphs (a)(1)(i) through (vii) of this section, and as revised by WGQ 2014 Annual Plan Item 11c and Minor Correction MC14018, as incorporated herein by reference in paragraphs (a)(1)(viii) and (ix) of this section.

* * * * *

(v) Capacity Release Related Standards (Version 2.0, November 30, 2010, with Minor Corrections Applied Through January 5, 2012);

(vii) Internet Electronic Transport Related Standards (Version 2.0, November 30, 2010, with Minor Corrections Applied Through January 2, 2011) with the exception of Standard 10.3.2;

(viii) WGQ 2014 Annual Plan Item 11c, Parts 1 and 2 (September 22, 2014); and


* * * * *

(b) * * *

(1) * * *

(iii) Within 60 days after a shipper request, a pipeline must file to make appropriate tariff changes at the Commission 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.

* * * * *

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

APPENDIX

<table>
<thead>
<tr>
<th>Time shifts—all times CCT</th>
<th>Current NAESB standards</th>
<th>Revised NAESB standards</th>
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Release timeline standards (WGQ Standards 1.3.2(i–v) and 5.3.2) in their tariffs. Standards for Business Practices of Interstate Natural Gas Pipelines, Order No. 587–U, FERC Stats. & Regs. ¶ 31,307, at P 39 & n.42 (2010). The pipeline would indicate which tariff provision complies with each of these standards.

260 Shippers can use the Commission’s electronic tariff system to locate the tariff record containing the NAESB standards, which will indicate the docket in which any waiver or extension of time was granted.

261 5 U.S.C. 804(2).
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