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**North American Energy Standards Board**

**Gas and Electric Interdependency Interim Report to the NAESB Board of Directors**

**December 13, 2005**

Below is the interim status report of the NAESB Gas-Electric Interdependency Committee (GEIC) and is supplemental to the June 27, 2005 report submitted to the Federal Energy Regulatory Commission (“Commission” or “FERC”) in Docket No. RM05-28-000. The final report will be prepared for Board review at its December 13, 2005 meeting.

**BACKGROUND**

In a December 2004 letter from Chairman Wood to Michael Desselle<sup>1</sup>, the chairman noted that the January 2004 cold snap in New England highlighted the need for better coordination between the natural gas pipelines and the electric grid, including Regional Transmission Organizations (RTOs)/Independent System Operators (ISOs) and gas-fired power generators. He noted that he was pleased to see the efforts underway by NAESB to develop business practices in both industries that would alleviate the coordination problem and be in place for the next winter season.

On June 27, 2005 a report was submitted to the Commission which included communication standards between natural gas transmission service providers and power generators and will be included in the next published version of both the Wholesale Electric Quadrant (WEQ) and Wholesale Gas Quadrant (WGQ) standards (version 1 and version 1.8, respectively). Prior to publication, they are available as final actions from the NAESB web site<sup>2</sup> related to the request from which they originated – R04021.<sup>3</sup> Also in the report, the NAESB Gas-Electric Interdependency Committee of the Board of Directors (“GEIC”) identified thirteen issues and categorized them as (1) indicating policy direction and decisions from federal, state or provincial regulatory agencies or other groups, including issues between contractual parties, (2) appropriate for review for NAESB standards development, (3) appropriate to be forwarded to NERC for consideration for reliability standards development, (4) appropriate for review as regional

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<sup>1</sup> The Chairman’s letter can be accessed from the NAESB web site at <http://www.naesb.org/protected/ferc121404.pdf>.

<sup>2</sup> The final actions after ratification for request no. R04021 may be accessed from the NAESB web site at [http://www.naesb.org/weq/weq\\_Final.asp](http://www.naesb.org/weq/weq_Final.asp) and [http://www.naesb.org/WGQ/wgq\\_Final.asp](http://www.naesb.org/WGQ/wgq_Final.asp).

<sup>3</sup> NAESB standards can be accessed in a number of ways. The standards are available for download in the protected area of the NAESB web site free of charge or can be purchased in electronic format from the NAESB Office. Access to the protected area of the NAESB web site is free to all current NAESB members as a benefit of NAESB membership, and non-members can register for home page access for \$3500 per year. The Commission has previously recognized that, “[I]t is common practice for standards organizations to charge for copies of their standards in order to defray the publishing costs as well as some of the administrative, legal, and other costs of developing the standards.” In addition to the standards themselves, all agendas, working papers, and subcommittee meeting minutes are publicly accessible on the NAESB web site free of charge.

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28 issues, and (5) a national infrastructure concern. For the majority of the issues identified there was more than one  
29 category assigned.

30 The conclusions reached on the issues identified pointed to the crucial need for extraordinary coordination among  
31 regulators, NERC, NAESB and industry participants of both the natural gas and electric wholesale markets. As the  
32 issues list demonstrated, many of the items required the attention of more than one of the groups, and that resolution  
33 of many of the items will be based on decisions neither made nor taken by NAESB. Specific to NAESB, before  
34 NAESB can move further in developing business practice standards to address the coordination of the two  
35 industries, policy direction and industry willingness for change is required – otherwise, NAESB may be in the  
36 position of developing business practices and striving to achieve industry consensus for standards that the industry is  
37 not convinced are needed. For the two outstanding requests R04016 (Energy Day assigned to both the wholesale  
38 gas and wholesale electric quadrants) and R04020 (Electric Market Timelines assigned to the wholesale electric  
39 quadrant); the requests have already been assigned to NAESB for action both by the NAESB Executive Committee  
40 and by the Joint Interface Committee. The requests have not been addressed at this time –through actions taken by  
41 the Board of Directors on June 22.

42 On June 22, the Board recognized that requests R04016 and R04020 were symptoms of many of the issues  
43 identified, and as such, charged the GEIC with the preparation of a standards development request that reflected the  
44 intent of both of these requests and included other aspects of gas-electric interdependency that were evident in the  
45 issues lists (such as issues #5, #10 and #12) and targeted for business practices development. The request, once  
46 developed, would be reviewed by the Board for inclusion in the NAESB Annual Plan, and would be processed  
47 through NAESB’s normal process for standards. An important direction from the Board in its instructions to the  
48 GEIC was that the members of the GEIC should ascertain a level of industry support for such actions anticipated by  
49 the request before standards development request is submitted. In summary, the committee members should not  
50 recommend actions in a standards request that they did not anticipate would garner sufficient industry support.

## 51 **PROCESS USED BY THE NAESB GAS-ELECTRIC INTERDEPENDENCY COMMITTEE**

52 The GEIC met four times (August 16, September 8, October 6, and October 24) following the June 22 Board of  
53 Directors meeting. The meetings were open and posted on the NAESB web site for all interested parties. Observers  
54 were welcomed, and did attend the meetings. Notes were taken for all meetings and posted on the web site along  
55 with agendas and work papers. The board committee is considered a named committee of NAESB – the members  
56 are named by the Chairman of the Board of Directors and are either board members, members of the NAESB  
57 Advisory Council, or specifically requested to join because of their knowledge of the markets. The work products  
58 of the committee were prepared by the committee members with staff administrative support and forwarded to the  
59 Board of Directors for review and approval. The GEIC is chaired by Jim Templeton, a NAESB Board member and  
60 former chairman of the organization.

## 61 **CONCLUSIONS REACHED BY THE NAESB GAS-ELECTRIC INTERDEPENDENCY COMMITTEE**

62 In discussions of possible standards development efforts, six potential activities were identified where existing  
63 standards should be reexamined to determine whether updates or new business practices could be written to further  
64 improve the interaction between the gas and electric industries. The six activities are an outgrowth of the analysis of  
65 13 issues described in the June 27 report to the FERC on gas-electric interdependency<sup>4</sup>, most of which require policy

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<sup>4</sup> NAESB prepared and submitted a report on June 27, 2005, in Docket No. RM05-28-000, “Standards for the Coordination of Business Practices Between Public Utilities and Interstate Natural Gas Pipelines,” which included 10 communication standards between transporters of natural gas and power generation facilities as well as 13 coordination issues identified, most of which had policy implications.

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66 direction if they are to be undertaken. Similarly, these six activities identified have policy implications. During the  
67 identification of the potential development activities, general concerns were voiced by committee members on the  
68 interaction of the wholesale gas and electric quadrants and the commitment of both groups to come equally to the  
69 table with solutions. The status of the two outstanding requests (R04016 and R04020) was also discussed.

70 Additionally, during discussions of these possible efforts, concerns were identified that may pose roadblocks in  
71 garnering sufficient industry support to proceed. Modification by the gas industry of established processes and  
72 practices to address problems that affect both industries will not necessarily improve the gas/electric interface unless  
73 the electric industry also works to address the electric problems. If modifications are made, they should be made in  
74 both the gas and electric industries to ensure both are working to improve gas/electric coordination. The six efforts  
75 identified that could be included in a standards development request were:

- 76 1. Enhance the standards to support Capacity Release pricing on an index<sup>5</sup> for those pipelines that have the FERC  
77 authority to price capacity on an index basis. The concerns raised included:
- 78 • Removal of the pricing cap to make it more attractive for firm gas transportation holders to release the  
79 capacity to others was raised during the discussion, but it would require regulatory policy changes and is  
80 specifically not anticipated as part of this item.
- 81 2. Review the possibility of adding an additional intraday nomination cycle with bumping rights to provide more  
82 flexibility to shippers, including power generators, with firm transportation rights such that they can nominate  
83 for natural gas supporting their market clearing times. The concerns raised were:
- 84 • Adding an additional cycle may have impacts on the timing of the existing nomination cycles.
  - 85 • The timing of the various nomination cycles may have different impacts on different parties and/or other  
86 NAESB standards, which must be considered before any changes are made.
  - 87 • Additional Wholesale Electric Quadrant standards may be needed to take advantage of a revised gas  
88 nomination cycle.
  - 89 • The proposed business practices may be more acceptable to the gas industry if developed in conjunction  
90 with Item 3 below.
- 91 3. Review and modify the requirements for organized electric markets so that the markets clear in sufficient time  
92 to nominate within the existing gas nomination timelines. The concerns raised were:
- 93 • It may be difficult for organized markets to be in compliance with this proposed business practice given the  
94 existing nomination timelines; the proposed business practices may be more acceptable to the electric  
95 industry if developed in conjunction with Item 2 above.
  - 96 • It will be necessary to gain consensus in the electric industry to standardize the electric timelines, each of  
97 which have been developed regionally. In the alternative, the electric industry can create business practices  
98 that support market clearing within the gas nomination cycles.
  - 99 • The ISOs and RTOs will need to make modifications to each of their separate processes to support NAESB  
100 business practices that require the electric markets to clear prior to the timely gas nomination timelines.
- 101 4. Review the ability of pipelines to shift gas for primary firm transportation within a pipeline path without having  
102 to re-offer as secondary firm transportation service. The concerns raised were:
- 103 • Current no bump rules limit firm customers' ability to divert gas to another market mid-day without  
104 reallocation. If pipelines could be operationally indifferent, then they could switch deliveries without

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<sup>5</sup> A work paper was provided by National Fuel Gas Distribution, and is attached.

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105 facing the equity issues that arise for those customers who were not originally scheduled because they did  
106 not contract for firm transportation, but delivery is switched from firm transportation customers to  
107 customers who also did not contract for firm transportation. However, this would conflict with current  
108 tariff and policy equity issues. Any business practices created must be non-discriminatory.

109 • If it is determined that this function is appropriate, policy changes may be required.

110 5. Require generators that declare availability for the day ahead market to have the appropriate commercial  
111 arrangements to fulfill the needed obligations. The concerns raised were:

112 • Being too prescriptive as to how the obligations are met interferes with the risk management strategies of  
113 market participants.

114 • To the extent this proposal needs to address reliability aspects of this issue, those concerns will be directed  
115 to NERC.

116 • The issue of firm transportation as it relates to resource adequacy is being addressed as part of the proposed  
117 NERC Resource Adequacy Standard currently under development.

118 6. Develop the appropriate supporting definitions for new business practices for the Wholesale Electric Quadrant,  
119 including but not limited to definitions for: alternate fuel capability, usable alternate fuel capability, firm  
120 transportation service, firm sales service, firm supply, and “must run” generator. The concerns raised were:

121 • In previous attempts, the Wholesale Electric Quadrant was unable to reach consensus on definitions of  
122 similar terms.

123 • Although these definitions will apply to Wholesale Electric Quadrant, the definitions should be developed  
124 with the appropriate input from the Wholesale Gas Quadrant to ensure consistency with gas products.

125 As noted in the prior report of June 27, to accomplish the above standards development efforts will demand  
126 extraordinary coordination of the industry participants of both the natural gas and electric wholesale markets.

127 As general comments to the above six efforts, for all efforts that were focused on wholesale gas efforts (efforts 1, 2  
128 and 4), a general comment was made that the wholesale electric quadrant should come to the table with a  
129 willingness to also make changes to their process. The discussion held so far does not indicate a willingness to  
130 create business practices for wholesale electric markets. It is the opinion of the committee members that the  
131 organized electric markets, such as the ISOs and RTOs and their stakeholder groups, may not be interested in  
132 working within NAESB to create the needed business practices. It is anticipated that their approach would be  
133 regional solutions developed individually. Along these lines, the electric market participants of the GEIC have not  
134 identified any sponsors for the efforts directed at the wholesale electric market (efforts 3, 5 and 6), and a broader  
135 outreach to Edison Electric Institute and other WEQ NAESB members is in order.

136 For the two outstanding requests R04016 (Energy Day assigned to both the wholesale gas and wholesale electric  
137 quadrants) and R04020 (Electric Market Timelines assigned to the wholesale electric quadrant); the requests have  
138 already been assigned to NAESB for action both by the NAESB Executive Committees and by the Joint Interface  
139 Committee. At the Board meeting on June 22, the Board instructed the Executive Committees to not proceed with  
140 these requests even though they had been submitted, approved as within NAESB’s scope, assigned to the  
141 appropriate quadrants and had also been approved by the Joint Interface Committee. The Board recognized that  
142 requests R04016 and R04020 were symptoms of many of the issues identified, and as such, delayed action on the  
143 requests. The two outstanding requests would be reconsidered by the Board for development after the GEIC had  
144 completed its analysis and prepared new standards development requests. It was anticipated that the new standards  
145 requests would supersede and replace them. The submitters of the requests have agreed to withdraw them once the  
146 final report and/or request(s) for standards development is completed.

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147 **NEXT STEPS**

148 In considering the development of new requests that would address one or more of the six development efforts  
149 identified by the GEIC, the concerns identified the potential need for regulatory policies, as these efforts are  
150 controversial and the ability to achieve substantial industry consensus is not certain. Because of this concern, the  
151 committee did not prepare requests for standards development as directed by the Board of Directors in June.  
152 Instead, the committee highlighted the six areas that may be beneficial for standards development, if the industry  
153 supports such development. It is the committee's opinion that the lack of industry support poses sufficient  
154 roadblocks to development and regulatory policy guidance is needed before further efforts can be undertaken.  
155 Instead of requests, the committee prepared this report, which was endorsed by the Board of Directors on December  
156 13 and will be forwarded to the FERC as a final update report on gas-electric interdependency issues. With the  
157 Board approval of this report as a final update, the submitters withdrew their requests R04016 and R04020<sup>6</sup>, as the  
158 roadblocks noted above apply equally well to the requests. The GEIC efforts are considered complete with the  
159 submittal of this final report as endorsed by the Board of Directors to the FERC.

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<sup>6</sup> Request No. R04016 to develop a standard definition for Energy Day was submitted to NAESB on May 25, 2004 by KeySpan Utility Services and Duke Energy Gas Transmission and assigned jointly to the Wholesale Gas Quadrant and Wholesale Electric Quadrant for standards development. The Joint Interface Committee voted to support its assignment to NAESB on September 21, 2004.

Request No. R04020 to establish business standards relating to electric transaction scheduling and timelines was submitted to NAESB on June 29, 2004 by Tennessee Valley Authority and assigned to the Wholesale Electric Quadrant for standards development. The NERC/NAESB Joint Interface Committee voted to support its assignment to NAESB on January 18, 2005.

**TO: J. Templeton, Chair, GEIC**

**FROM: M. Novak**

**DATE: August 16, 2005**

**RE: Proposed Standards Development - NAESB Report on WEQ and WGQ Business Practice Standards for Transmission Service Provider-Power Plant Operator Communications and the Gas and Electric Interdependency Report (June 27 Report)**

Within the June 27 Report, Issue #9 and Issue #10, deal with diversion gas and/or capacity from LDCs to the real-time generation market. Issue #9 references market-based pricing and issue #10 references tariffs and development of business practices. Any attempt to monetize shipper releases of pipeline capacity in terms of real-time generation load price fluctuations is currently bound by the maximum tariff rates applicable to capacity, as well as bidding rules.

Current NAESB WGQ Standards governing capacity release are more restrictive on pricing beneath the maximum tariff rate than current Commission policy requires. As currently structured, NAESB WGQ Standard 5.3.26 requires the releasing shipper to determine whether bidding should take place in terms of dollars and cents or as a percentage of maximum rate. NAESB WGQ Standard 5.3.19 can be read to restrict re-releases to be on the same terms and basis as the primary release when a more current reading of Commission policy would say this is a matter between the releasing and replacement shipper subject to broader bidding rules and maximum tariff rate limits. Additionally, the standards can be read to restrict the form of releases to volumetric and reservation forms that at the time these standards were drafted, appeared to comport with all the options necessary.

In more recent years, pipelines have sold capacity at discounted rates where the effective rate was tied to a published price index. Commission policy allows that releasing shippers should be free to offer the same type of pricing arrangement that the pipeline offers. At least where pipelines offer discounts based upon price indices, Commission policy appears to support releasing shippers offering the same type of pricing in a capacity release.

To capture real-time generation load price fluctuations, a firm shipper (e.g. an LDC) should be able to propose a release rate based off a published electric price index. The rate would fluctuate each day between a releasing shipper specified floor and the maximum tariff rate. In theory, this would create an economic incentive to provide more short-term capacity to the gas-fired generation market because with the prospect of high release value, releasing shippers can explore replacement capacity alternatives that otherwise would not be cost-effective.

While no pipeline tariffs prohibit capacity release transactions based off published price indices, the NAESB Standards, which in most cases have been incorporated into pipeline tariff by reference, do not support index-based releases. NAESB standards should support such release transactions and if the Commission relaxed the prohibition on releases above the maximum applicable tariff rate, then standards can further evolve.

As a general matter, technology has progressed tremendously since the initial drafting of the NAESB WGQ Capacity Release Standards. Along with the evolution of Commission policy governing the capacity release market, there appears to be justification for GEIC considering development of a request for the WGQ to review and update its Capacity Release Standards.

Issues # 9 and #10 are attached for reference.

## Selected Issues from June 27 Report

*Issue #9:* Where voluntary arrangements between pipeline shippers could accommodate the real-time generation market (e.g. instantaneous diversion of gas from an LDC to an adjacent market) neither the pipeline nor releasers of capacity are allowed to charge short-term rates that would match the instantaneous market value of capacity to a peaking generator. Further, the ability of pipeline tariff terms (e.g., nomination cycles and release procedures) to accommodate such arrangements vary as to their flexibility. Modifications to policy would enable pipelines and releasers of capacity to charge peaking generators short-term rates.

*Note:* Historically, pipelines have used a combination of firm pipeline capacity, pipeline contracts, storage, balancing, parking services and curtailment priorities to mitigate fluctuating load requirements. Pipeline tariffs are designed to insure reliable service to all customers, so any accommodation of such voluntary arrangements would require a process to be certain there was no adverse impact on other customers. Should such arrangements be incorporated into tariffs, business practices can be developed for support. As for rate flexibility, in the past the Commission has experimented with market-based pricing for released capacity. Short-term monetizing of load price fluctuation (hourly, daily, weekly and seasonally) as well as daily and hourly volume accommodation may be appropriate for consideration.

*Issue #10:* If voluntary arrangements between pipeline shippers are created that accommodate the real-time generation market ((e.g. instantaneous diversion of gas from an LDC to an adjacent market), business practices could be drafted that support the trade of gas from an LDC to an adjacent market.

*Note:* Pipeline tariffs are designed to insure reliable service to all customers, so any accommodation of such voluntary arrangements would require a process to be certain there was no adverse impact on other customers. Should such arrangements be incorporated into tariffs, business practices can be developed for support.



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TO: Posting on NAESB Web Site  
 FROM: Rae McQuade, NAESB Executive Director  
 RE: Board Gas-Electric Interdependency Committee – Named Board Members  
 DATE: November 3, 2004

The Board Gas-Electric Interdependency Committee is chaired by Jim Templeton. The named Board members that comprise the Board Gas-Electric Interdependency Committee are as follows:

Name	Organization	Quadrant	Phone	Email
Vicky Bailey	Johnston & Associates		202-659-8400	<a href="mailto:vbailey@johnstondc.com">vbailey@johnstondc.com</a>
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