

ANALYSIS
OF THE
MIDWESTERN GAS TRANSMISSION COMPANY
EASTERN EXTENSION PROJECT
UNDER THE
FEDERAL ENERGY REGULATORY COMMISSION
POLICY STATEMENT OF SEPTEMBER 15, 1999

Response to Mr. William W. Wade report entitled “Alternatives to MGT’s Eastern Extension Project” filed March 1, 2005 in Docket No. PF05-2

Project Overview and Background

Piedmont Natural Gas Company (Piedmont) contacted Midwestern Gas Transmission Company (MGT) in March 2004 and requested that MGT prepare a proposal to provide a minimum of 120,000 Dth/d of natural gas volumes at interconnects with Columbia Gulf Transmission Company (Columbia Gulf) and East Tennessee Natural Gas, LLC (East Tennessee) near Hartsville, Tennessee via an extension of the MGT pipeline system. Piedmont advised that this incremental capacity was required to be delivered near Hartsville to meet its demand growth projections on the eastern side of its distribution system in the Nashville area and in North and South Carolina. The deliveries to Columbia Gulf were intended to serve Piedmont’s subsidiary, Nashville Gas Company (Nashville Gas), and the deliveries to East Tennessee were intended to serve Piedmont’s distribution systems in North and South Carolina.

Following an open season and negotiations, Piedmont entered into a precedent agreement with MGT for the transportation of 120,000 Dth/d of natural gas for a term of 15-years. This volume constitutes one hundred (100) percent of the planned capacity of the Eastern Extension Project. The receipt point for the volumes contracted under the precedent agreement is the interconnect between the Eastern Extension Project and the terminus of the existing MGT pipeline near Portland, Tennessee. MGT will deliver 100,000 Dth/d of this natural gas into the Columbia Gulf pipeline system near Hartsville. Piedmont plans to provide this natural gas to Nashville Gas which serves residential, commercial and industrial customers in Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Trousdale, Williamson and Wilson Counties. The remaining 20,000 Dth/d of natural gas will be delivered into the East Tennessee system for delivery to Piedmont’s distribution systems in North and South Carolina. The interconnect with East Tennessee is proposed to be located east of the Texas Eastern Transmission, LP (Texas Eastern) interconnect with East Tennessee because of the lack of long term firm capacity availability on East

Tennessee between its interconnects with Tennessee Gas Pipeline Company (Tennessee Gas) at Ridgetop and Texas Eastern near Hartsville.

MGT's Compliance with Regulatory Standards Governing New Pipeline Construction

Under the September 15, 1999 Policy Statement (Policy Statement) of the Federal Energy Regulatory Commission (Commission) the threshold question is whether the proposed pipeline will be subsidized by the pipeline's existing customers. The Eastern Extension Project meets this threshold requirement since MGT has proposed an incremental rate structure for the Eastern Extension Project. No existing MGT customers will be subsidizing the Eastern Extension Project.

Assuming that the threshold, no-subsidy standard is satisfied, the Commission then proceeds to evaluate a project by balancing the evidence of public benefits to be achieved against the residual adverse effects. The Commission recognizes that infrastructure enhancements and the introduction of competitive supply alternatives constitute public benefits that weigh in favor of certification, particularly where the proposed new capacity is fully, or near-fully, subscribed. Where such benefits are shown, as in the case of the Eastern Extension Project, general statements of landowner opposition will not provide a basis for denying certification.

MGT has made efforts to eliminate or minimize any adverse effects the Eastern Extension Project might have on the landowners and communities affected by the proposed route. MGT has adjusted the location of the proposed route on the landowners' property as a result of consideration of land use or natural resource constraints or in response to landowners' or other stakeholders' requests on over 20 miles of the total route of 30.9 miles. MGT will continue to address such concerns in the future. Approximately 80 percent of the proposed route is in pasture or agricultural areas and less than 1 percent of the proposed route is in residential areas.

To the extent possible, MGT continues to respond to the landowner and community concerns regarding the Eastern Extension Project. Prior to and at the time of the Open House meetings in November 2004, most landowners were willing to discuss the Eastern Extension Project as is evidenced by the fact that nearly 85% of the landowners granted permission to conduct surveys on their property. However, MGT's recent efforts to discuss the Eastern Extension Project with landowners and educate the public have been substantially frustrated, owing principally to the activities of "S.T.O.P." (Sumner and Trousdale Counties in Opposition to the Pipeline), an organization of landowners and community members that have asserted opposition to the Eastern Extension Project and have discouraged landowner communications with MGT. The refusal of some of the landowners to meet and discuss their concerns with MGT representatives has effectively prevented MGT from addressing many of their concerns.

Landowner and community opposition to a proposed pipeline is not uncommon. In fact, in recent years, a number of natural gas infrastructure projects have faced intense landowner/community challenges and the level and profile of such opposition continues

to increase. See “An Updated Assessment of Pipeline and Storage Infrastructure for the North American Gas Market: Adverse Consequences of Delays in the Construction of Natural Gas Infrastructure” Prepared for The INGAA Foundation, Inc. by Energy and Environmental Analysis, Inc. July 2004, at page 2 (hereinafter “INGAA Report”). Nonetheless, the Commission has made clear that a project that satisfies the Policy Statement’s standards will not be denied certification based on the applicant’s inability to acquire a high percentage of right-of-way by negotiation prior to filing. See, e.g., *Guardian Pipeline, LLC*, 94 FERC ¶ 61,269 (2001) (Commission rejects landowners’ argument that certificate should be denied based on applicant’s failure to acquire any right-of-way prior to filing). Indeed, the Commission has specifically rejected arguments that negotiated rights-of-way should be required of a certificate applicant, recognizing that to impose such a requirement would contravene the explicit provisions of Section 7(h) of the Natural Gas Act. *Colorado Interstate Gas Co.*, 96 FERC ¶ 61,176 (2001).

The “Wade Report” Regarding Project Need

Mr. William W. Wade presented a report entitled “Alternatives to MGT’s Eastern Extension Project” on behalf of the “intervenor group” at the Scoping Meeting and subsequently filed the report in Docket PF05-02 (the “Wade Report”). The Wade Report contends that the Eastern Extension Project is not needed and that certification of this project would be inconsistent with the Commission’s Policy Statement.

Mr. Wade argues that there is no demand for the Eastern Extension Project. However, his conclusions are contrary to the facts presented here and contrary to established Commission policy as set forth in the Policy Statement. As mentioned previously, the Eastern Extension Project is 100 percent subscribed under a 15-year precedent agreement. As such, the Eastern Extension Project meets the “need” condition for certification under prevailing Commission standards. See *Greenbrier Pipeline Co., LLC*, 103 FERC ¶ 61,024 at P12 (2003) (The Commission finds that project’s high percentage of capacity subscriptions, “. . . by itself warrants the project’s approval”)(emphasis added); see also *TransColorado Gas Transmission Co.*, 106 FERC ¶ 61,276 at P14 (2004) (In response to a landowner’s claimed lack of need for a project, the Commission approved the project, relying exclusively on the fact that the project was fully subscribed).

Thus, the Wade Report’s public benefits analysis, to the extent it relies exclusively or even primarily on growth projections of natural gas demand, overlooks controlling evidence of project need – i.e., 100% subscription of planned Eastern Extension capacity. Moreover, and as next discussed, the Wade Report effectively seeks to have the Commission second-guess the supply choices of the project’s shipper – something the Commission has, with rare exception, declined to do since the inception of open-access. See *Questar Southern Trails Pipeline Co.*, 89 FERC ¶ 61,050 at 61,144 (1999) (The Commission notes that in the context of a pipeline project where there were no existing customers and therefore no subsidy issues, “the Commission will not second-guess the shippers’ decisions.”); see also *Questar Pipeline Co.*, 110 FERC ¶ 61,035 at P16 (2005) (The Commission observes that project need is satisfied by long term shipper contracts

and that shippers are “well qualified to assess objectively the demand for additional natural gas service”).

The Wade Report nonetheless asserts that Nashville Gas does not need additional natural gas. Mr. Wade cites population studies and certain natural gas demand forecasts as support for this proposition. Yet, Mr. Wade’s “need” analysis is developed on the basis of geographic growth estimates without regard to the single most important indication of need – *i.e.*, the full subscription of planned capacity by Piedmont.

The Wade Report also contends that the natural gas contracted by Piedmont on the Eastern Extension Project replaces natural gas currently provided by Tennessee Gas and that Piedmont CEO Thomas E. Skains noted the decline in per customer natural gas usage in testimony filed with the Tennessee Regulatory Authority in April 2003. However, a more fulsome recounting of Mr. Skains’ testimony would include the fact that Mr. Skains stated that Nashville Gas had increased its customer base by more than 10,000 customers. And while Piedmont is better suited to address specific market demand issues and the status of its contracts, Piedmont’s willingness to commit to capacity for a 15-year term demonstrates its conviction regarding the need for additional supply to meet future requirements.

Finally, the Wade Report fails to address a host of other relevant considerations, including: 1) factors other than population forecasts affect the demand for natural gas; 2) the obligation of LDCs to supply adequate amounts of natural gas based upon peak demand, not an average daily demand; 3) the Commission’s policy of promoting supply choices and competitive alternatives even where the project may replace services provided by an existing pipeline; and 4) the availability of reliable natural gas supplies through MGT that are not available from Tennessee Gas and Columbia Gulf.

Factors Affecting Natural Gas Demand

Even assuming, *arguendo*, the relevance of Mr. Wade’s statistical presentation, his report contains assumptions that undermine the report’s reliability. For example, the Wade Report bases its demand growth projections upon an extrapolation of Energy Information Administration’s data onto population forecasts of the entire Nashville area. It is worth noting that factors other than population forecasts may be considered in developing reliable demand growth projections. Growth in the economy, the price and availability of alternative fuels, demand for electricity and environmental and other regulations that might affect fuel competition, particularly in the power generation market, impact the demand for natural gas. *See* INGAA Report, *supra* at page 18.

Moreover, in contrast to the claims made in the Wade Report, the region denoted as the Southeast and Florida had natural gas demand of approximately 2,580 Bcf in 2003 and is projected to have natural gas demand of approximately 4,745 Bcf in 2020. *Id.* at pages 26 and 27. This equates to an increase in natural gas demand in the region of approximately 84%. Other published accounts suggest expansive growth in the Piedmont service region, particularly in Sumner County, *See* “*County Looks at Hiring*

Engineer” originally published in the Gallatin (Tennessee) News Examiner on March 28, 2005 indicating “explosive” growth in Sumner County and quoting the county’s Planning Director as follows: “We need to realize that Sumner County is the next big growth area. We have all kinds of evidence to prove that.” In any event, as the Commission has consistently recognized, the proper arbiter of project need is the marketplace and, specifically, the shipper or shippers that assume the financial risk associated with a long-term capacity subscription.

Average Daily vs. Peak Day Demand

The Wade Report assumes that Nashville Gas should build its supply portfolio based upon the average daily demand for natural gas. In fact, however, LDCs must be prepared to meet peak day demand, not an average daily demand. In the Nashville area, the peak day natural gas demand is about 4 times the average demand for residential customers and about 3.5 times the average demand for commercial customers (<http://capabilities.itron.com/eShapes/EShapes.cfm>). Planning for the average load growth as assumed and projected in the Wade Report would lead to a service failure on many days where actual loads are above the annual average load and when an adequate supply of natural gas is most critical to the consumer.

Displacement of Existing Supply

The Wade Report alleges that the contract between MGT and Piedmont for 120 MMCFD will replace an existing contract with Tennessee Gas for 56 MMCFD, but offers no evidence to support this allegation. MGT has been informed by Piedmont that this allegation is incorrect. However, it is clear that even if such were the case, the consideration of the impact of a new project on an existing pipeline does not mean that the Commission will protect existing pipelines from the risk of loss of market share to a new entrant. *See Guardian*, 91 FERC at 61,966-67. The Commission has also recognized that it is the prospect of a rival pipeline, and the availability of choices, that encourages competitive pricing of transportation services. *Id.* at 61,976-78.

Supply Adequacy

The Wade Report claims that natural gas supplies through existing pipelines are adequate and therefore there is no need for the Eastern Extension Project. Again, accepting for argument’s sake the relevance of this claim (and notwithstanding that the Commission’s post-Order No. 636 certificate regulations have all but eliminated any supply showing requirement, it bears noting that most industry analysts believe that U.S. and Canadian natural gas production from traditional basins, including Gulf of Mexico Shelf, Onshore Gulf of Mexico and Western Canada, is in decline. *See* INGAA Report at page 36. Tennessee Gas and Columbia Gulf source a majority of their natural gas supplies from Gulf of Mexico Shelf and Onshore Gulf of Mexico. In order to sustain an adequate level of natural gas supply for Tennessee Gas and Columbia Gulf, the declining production in these regions must be supplanted by production from the Gulf of Mexico Slope and LNG imports. There is only one LNG terminal currently existing on the Gulf. The siting and

permitting issues for additional LNG terminals and their associated infrastructure are difficult and time-consuming to resolve. Additionally, “. . . the delivered cost of LNG imports are high, making LNG one of the most expensive sources of new supply on a unit basis. Unlike domestic or Canadian supplies, the U.S. must compete with the rest of the world for LNG. World market conditions influence LNG prices.” *See Id.* at page 41.

The Wade Report states that the MGT source of supply is mostly Canadian and possibly some Rocky Mountain natural gas in the future. The Wade Report fails to note that the northern terminus of the MGT system is located at the Chicago Hub. MGT has interconnects with Natural Gas Pipeline Company of America (NGPL), Alliance Pipeline, Northern Border Pipeline Company, and ANR. Through these multiple upstream connections Piedmont will be able to source natural gas from Canada, the Rocky Mountains, the Permian Basin and the Mid-Continent natural gas supply regions.

The Wade Report also states that very little Rocky Mountain natural gas can reach Chicago by pipeline. Natural gas production from the Rocky Mountains currently reaches Chicago through transportation on Northern Border Pipeline Company, Northern Natural Gas Company (NNG) and NGPL. The recent completion of the Cheyenne Plains project, which transports natural gas from the Cheyenne Hub to several interstate pipeline connections in the Mid-Continent area, allows even more Rocky Mountain natural gas to reach the Chicago area through NGPL, NNG and ANR. Several more projects including the Bison Project, a proposed Cheyenne Plains expansion and the Advantage Pipeline are planned to increase the capacity to deliver Rocky Mountain natural gas supplies to the Chicago area.

Moreover, while there is a decline in the production from the Western Canadian Supply Basin, there are a number of new supply sources expected to become available in the future from the Mackenzie Delta and Alaskan natural gas production. Together, the Alaskan and Mackenzie Delta production is predicted to increase from 2% in 2003 to 11% in 2020 of all natural gas production in North America. Further, the Rocky Mountain natural gas production is expected to increase from 9% to 14% of all natural gas production in Northern America, in 2003 and 2020, respectively. *See* INGAA Report at pages 38 and 39. Clearly, natural gas supplies from these areas will be increasing, not declining, as the Wade Report claims.

Supply Diversity via Existing Pipelines

The Wade Report also asserts that Piedmont could achieve its goal of supply diversity through existing pipelines. In particular, the Wade Report claims that Nashville Gas can achieve the same supply diversity as provided by the Eastern Extension Project through the following two backhaul arrangements.

1. Backhaul arrangement(s) utilizing the existing systems of Tennessee Gas and East Tennessee

Under this alternative proposed in the Wade Report, MGT would deliver natural gas to Tennessee Gas at Portland and Tennessee Gas would deliver an equivalent volume of natural gas from its system to East Tennessee at an existing interconnect near Ridgetop for transport to the Hartsville area and/or an existing interconnect referred to as Lobelville. As next discussed, however, this arrangement does not meet the business objectives of Piedmont and otherwise does not present a viable alternative to the Eastern Extension Project.

The Eastern Expansion Project is designed and was sited to meet the natural gas requirements of Piedmont, as determined by Piedmont's informed assessment of demand, price, reliability of supply and other considerations. In this regard, during the development of the Eastern Extension Project the Director of Business Development for East Tennessee advised MGT to locate its interconnection with East Tennessee east of East Tennessee's interconnect with Texas Eastern. This location was recommended because the existing East Tennessee system lacked available firm capacity for the incremental volumes required by Piedmont in the path between its interconnects with Tennessee Gas at Ridgetop and Texas Eastern near Hartsville.

Exhibit 9 of the Wade report included data regarding Tennessee Gas delivery capacity to East Tennessee at Greenbrier (Ridgetop) and Lobelville. However, the data that is pertinent to the analysis of this backhaul alternative is not the delivery capacity of Tennessee Gas, but rather the ability of East Tennessee to receive and take away natural gas from Tennessee Gas. The East Tennessee system must have the availability of both receipt point capacity and mainline capacity on a firm basis in order to accommodate the backhaul proposed by the Wade Report.

According to the East Tennessee website as of April 1, 2005, the total design capacity of East Tennessee's Ridgetop Receipt Point is 292,120 Dth/day and the unsubscribed quantity available is 3,694 Dth/day. The website also lists the total design capacity of East Tennessee's Lobelville Receipt Point as 205,320 Dth/day and the unsubscribed quantity available at that point as 94,641 Dth/day. The East Tennessee website also states that "Availability of meter capacity does not guarantee available mainline capacity." Therefore, based upon the above data, there is insufficient firm receipt point capacity available on the East Tennessee system to accommodate a backhaul of 120,000 Dth/day as proposed in the Wade Report.

As previously noted, the availability of meter (receipt) capacity does not guarantee available mainline capacity. The East Tennessee website states that the operational capacity of the mainline between Ridgetop and Dixon Springs (Dixon Springs is east of the East Tennessee interconnect with Texas Eastern) is 300,000 Dth/d and the operational capacity of the mainline between Lobelville and Lewisburg (Lewisburg is east of the East Tennessee interconnect with Texas Eastern) is 110,000 Dth/d. In addition, the East Tennessee website page also indicated that for unsubscribed capacity (attached), only 1,000 MDTQ was unsubscribed as of November 1, 2004 for the path "TGP Ridgetop – Various points on Line 3100, 3200 and 3300 up to Nora Lateral". No path referencing TGP Lobelville was listed. Excluding the Patriot Extension in Virginia and North

Carolina, no other path on the East Tennessee system had more than 13,000 MDTQ of unsubscribed capacity as of Nov 1, 2004. Therefore, based upon this data, there is insufficient firm mainline capacity available on the East Tennessee system to accommodate a backhaul of 120,000 Dth/day as proposed in the Wade Report.

Consequently, East Tennessee's system would have to be expanded to accommodate the incremental volumes required by Piedmont. Infrastructure information contained within the East Tennessee System Flow Diagram for 2002 indicates that such expansion would likely require the addition of compression and looping of mainline pipeline; therefore such an alternative is not economically feasible and practical. Such an expansion of that system would also not likely represent a significant environmental advantage over the proposed Eastern Extension Project due to the environmental impacts associated with such an expansion. Moreover, even if such an expansion were practical it would not meet Piedmont's objective of having increased reliability and flexibility in the natural gas transportation grid resulting from an additional transportation alternative and associated interconnects.

2. Backhaul arrangement(s) utilizing the existing system of Tennessee Gas

Under this alternative proposed in the Wade Report, MGT would deliver natural gas to Tennessee Gas at Portland and Tennessee Gas would deliver an equivalent volume of natural gas from its system to Nashville Gas at existing interconnects near Nashville. This arrangement does not meet the business objectives of Piedmont and is no more practical or viable than the first backhaul proposal advanced in the Wade Report.

Specifically, in order to meet Piedmont's demand growth requirements the incremental volume of natural gas needs to reach the eastern side of Nashville Gas' distribution system and Piedmont's distribution systems in North and South Carolina. Exhibit 8 of the Wade report included data regarding Tennessee Gas delivery capacity at two delivery points; Nashville and Nashville 2. The data that is pertinent to the analysis of this backhaul alternative is the ability of Nashville Gas to receive and take away natural gas from Tennessee Gas. The Nashville Gas system must have the availability of both receipt point capacity and mainline capacity in order to accommodate the backhaul on Tennessee Gas of 120,000 Dth/day as proposed in the Wade Report.

Piedmont has advised MGT that deliveries at Tennessee Gas' Nashville delivery points of the incremental volumes of natural gas required by Piedmont, if available on Tennessee Gas, would require significant construction from those delivery points eastward through the city of Nashville to points of interconnection on the east side of the Nashville Gas distribution system; this alternative, therefore, is not likely technically or economically feasible and practical. Such an extension of that system would also not likely represent a significant environmental advantage over the proposed Eastern Extension Project due to the environmental impacts associated with such an extension. Moreover, even if such an extension were practical it would not meet Piedmont's objective of having increased reliability and flexibility in the natural gas transportation grid resulting from an additional transportation alternative and associated interconnects. Nor will this alternative meet the

objective for the incremental volumes of the natural gas to reach Piedmont's distribution systems in North and South Carolina.

Summary

The certification of the Eastern Extension Project is consistent with the Commission's Policy Statement. The planned capacity of the Eastern Extension Project is one hundred (100) percent subscribed with an incremental rate structure under a 15-year precedent agreement. The Eastern Extension Project offers the public benefits of infrastructure enhancements that increase the reliability and flexibility of the natural gas grid, price competition resulting from natural gas sourced from the Chicago Hub and the introduction of a supply alternative that meets the demand growth needs of Piedmont. MGT is confident that, upon a thorough examination of the facts, the Commission will find that the Eastern Extension Project satisfies the Policy Statement's standards, provides public benefits that outweigh any potential adverse effects and otherwise meets the conditions for certification under Section 7 of the Natural Gas Act.