

Electric Industry Contracting Practices Drive Reliability

Natural gas currently fuels about a quarter of our country's electricity generation, and natural gas demand for power generation will grow in coming years because of environmental regulations, abundant domestic natural gas supplies and low natural gas prices. As demand increases, electric generators will need both gas supplies and pipeline transportation to get the natural gas to their power plants.

As gas demand for electric generation grows, pipeline capacity likely will become tighter even on pipelines that now have available capacity. This means that on high-demand days—when most generators need to operate **and** the pipeline's firm customers need to use all their contracted pipeline capacity—customers that have not contracted for firm capacity may find themselves without the pipeline capacity necessary to provide delivery of gas supply.

If a gas-fired generator has contracted only for interruptible pipeline service, it may not be able to produce electricity on a high-demand day. We all want natural gas and electric reliability.

Contracts for firm transportation capacity are the most reliable form of natural gas pipeline service. In many cases, electric generators have opted not to hold firm transportation capacity because adequate interruptible transportation capacity or "released capacity" (capacity acquired on the secondary market) has been available on most days of the year.

The practice of relying on interruptible or released capacity is reinforced by the pricing in organized wholesale power markets (i.e. RTO markets), which do not provide generators with an effective means to recover the costs associated with ensuring reliability through firm pipeline transportation.

Peaking generators that do not know when they will be dispatched and may only run several times a year, argue that holding firm

transportation is too costly since they do not know whether they will use it.

Yet, as natural gas demand grows, and as more gas generators come on line and run at higher load factors, interruptible transportation will become harder to schedule. More generators will be vying for the remaining unused or unscheduled transportation capacity on the pipeline and, even if interruptible transportation is available, it is limited each day to unsubscribed/unused capacity on a given pipeline.

Firm transportation service guarantees delivery without interruption (except in extraordinary circumstances) at the customer's primary firm delivery point. Pipelines may suspend, reduce or not schedule interruptible transportation services in accordance with the pipeline's tariff and FERC policy.

On many days of the year, interruptible transportation and released capacity will be unavailable because firm customers will be using their full contractual entitlements. On those days, pipelines cannot schedule interruptible transportation service. Pipelines commit to serve firm customers and must provide them with service priority. If a generator wants to ensure it will have the natural gas it needs to generate electricity every day—especially on high-demand days—in some markets it will need to contract for firm transportation service.

Unlike electric utilities, pipelines do not have reserve capacity or build on speculation to meet projected future market demand. The Federal Energy Regulatory Commission will not grant a certificate to an interstate natural gas pipeline unless the pipeline can demonstrate, typically through a showing that the pipeline has an adequate level of firm contractual commitments from shippers, that there is a market need for

the pipeline. Customers must enter into firm transportation contracts with sufficient time to allow the pipeline time to secure the necessary regulatory approvals and build.

A problem is that some electric wholesale power market rules create disincentives for generators to hold firm transportation contracts. Wholesale electric market design—which bases clearing prices on the lowest marginal costs—creates little or no incentive to hold firm capacity, which is more reliable but more expensive than interruptible capacity. Adjusting electric market design to provide a means to recover the cost of firm pipeline capacity, where needed for electric reliability, should be a major priority of policy makers.

Pipelines Can and Do Offer Special Services Geared To Electric Generation Customers' Needs

Many pipelines offer transportation services tailored to generators' needs, including flexible hourly swings, additional nomination opportunities, and no- or little-notice requirements. Pipelines will continue to offer flexible services to meet generators' needs.

Some services, such as a no-notice service, in which the generator can begin shipping gas little or no notice to the pipeline, may require the pipeline to reserve both pipeline and storage capacity in order to meet the particular needs of a generator. These pipeline assets are valuable and therefore, in some cases, such services may be more costly than standard firm transportation service. Yet unless generators can recover the cost of these services in wholesale electric rates, such services will remain unused. In fact, particularly in organized wholesale electric markets, generators largely are not using these services.

While pipelines can offer a higher-priority interruptible transportation service, the service remains interruptible, meaning that there is no guarantee of its availability during peak demand for pipeline transportation.

Key Points:

- Natural gas pipelines are *not* saying that all generators need 100% firm transportation. INGAA suggests that the electric industry, along with FERC and state regulators, should look at the level of firm transportation needed to obtain the desired level of electric reliability in a particular region. In some regions of the country, firm pipeline transportation may not be needed to ensure the desired level of reliability to the bulk power system. In other regions with tight pipeline capacity, firm transportation may be the only way to ensure both pipeline transportation service and construction of additional pipeline infrastructure necessary to alleviate constraints.
- As evidenced by the Polar Vortex of 2014, organized markets must ensure that generators are compensated for having the means necessary to preserve the reliability of the electric grid. While natural gas is not the only option, it is reasonable to assume that natural gas and the means to ensure its delivery will be part of the answer. As a result, organized markets and the regulators and public officials responsible for protecting consumers and ensuring reliability should craft solutions that provide creditworthy shippers with the ability to support the pipeline infrastructure needed to ensure natural gas delivery.
- Pipelines offer a variety of firm and interruptible transportation services and work with their customers to develop new and innovative no-notice, hourly and other firm services to meet unique generator customer needs. For the most part, electric generators in organized wholesale electric markets are not contracting for these services due to economic imperatives in their respective electric markets.