

## **Executive Summary**

### **Capacity Release - What Is It and Where Did It Come From?**

All transportation and storage of gas in interstate commerce is regulated by the Federal Energy Regulatory Commission (FERC or Commission). Interstate transportation and storage is performed by transportation service providers, which have their rates and terms of service regulated by the FERC. Under these regulations, the costs incurred by each transportation service provider to provide services are determined and then divided among the offered services (including firm), further sub-divided within those services, and finally divided among the customers contracting for those services (service requesters). The regulations govern both the manner in which services are provided by the transportation service provider and the manner in which services may be utilized by service requesters. (Henceforward within this Executive Summary, transportation means transportation and/or storage, as the context requires.)

The FERC decided in early 1988 that comparability between the services offered by the transportation service provider-as-merchant and the transportation service provider-as-transporter was essential to a competitive natural gas market. At first, the Commission sought to define and put into place comparability on a case-by-case basis, but ultimately decided to handle the matter generically. For nearly 2 years, the Commission sought public comments, held conferences and issued notices. The final product was a series of restructuring rules - Order 636, issued on April 8, 1992, and the subsequent Orders 636-A and 636-B.

### **Capacity Release Began With Pipeline Service Restructuring**

When the FERC ordered interstate pipelines to restructure the way they performed services for their customers, the previous 50 years of business practices were changed and many came to an end. Order 636 changed the way pipelines provide gas service to their customers. Previously, pipelines bought gas at one end of the pipe and sold it at the other. The pipeline capacity to transport gas from seller (producer) to buyer was owned by the pipeline and used to carry out this gas sales service. Most buyers were large, state-regulated utilities called local distribution companies (LDC's). With Order 636, the FERC required all sales services provided by the interstate pipelines to be carried out at the inlets or receipt points into the pipelines. From that point in the transaction chain to the point of consumption, the buyer's gas was to be transported by the pipeline under the same contract for transportation as was generally available to other service requesters. Thus, by the fall of 1993, all gas, without respect to the ownership of the gas prior to sale to the buyers, was to be transported to the buyers in the same way.

### **What is Capacity?**

A firm transportation contract grants capacity to a service requester at one or more points along a pipeline. Capacity is either specific as to both location (point) and quantity or is general as to location and specific as to quantity. A firm transportation contract gives a service requester the right to cause a transportation service provider to receive a specific quantity of

gas from that service requester at a point and/or deliver a specific quantity of gas to that service requester at point over a specific time period.

Order 636 not only changed the number and character of most transportation contracts, it also changed the way service requesters could use those contracts. Before Order 636, transportation contracts between transportation service providers and service requesters prohibited any use, sublet, assignment, sale or trading of the contract or rights within any contract by a service requester. In short, the capacity could only be used by the contracting service requester, absent a specific approval by the FERC.

When the sales contracts were converted to firm transportation contracts, several other changes also occurred. The main changes were:

1. The rate structure was changed to a straight-fixed-variable (SFV) structure, under which the costs of the transportation service provider to provide services are collected from each customer based on that customer's right to use its capacity, and no longer were any significant costs to be collected based upon the use of the firm contracted-for capacity;
2. Service requesters were granted the right to sell all or any portion of a contract for all or any portion of the effective time period (Capacity Release); and
3. Service requesters were given flexible receipt and delivery point rights which gave them additional inlet and outlet points to use on an as available basis even though the points were not specified in the contract (Flexible Points).

### **Capacity Release Involves the Sale of Capacity**

The process of selling all or any portion of a service requester's contract rights is called "Capacity Release". The three changes (SFV, Capacity Release, and Flexible Points) combined to make selling (releasing) capacity an economically sensible activity. First, the rate structure change means that holders of firm capacity who do not need the full contracted service may release the unneeded portions to acquiring service requesters, thus reducing their costs. Secondly, the ability to use specific contract rights to transfer gas at flexible receipt and/or delivery points in the same area as the specified rights means the rights for sale would be of value even if the released locations were not particularly useful at the time of the release. And finally, the simple fact that contract rights could be sold and resold at all was a new right granted to service requesters for the first time under Order 636.

### **Why Capacity Release and EDI?**

With the advent of the capacity release market, the FERC required pipelines to openly post the deals that their service requesters were seeking to transact. The Commission set up a process whereby all releases would, at a minimum, be posted for informational purposes. Next, if the release was for more than one calendar month, the release was required to be at "Maximum Rate" or to be available for open bidding by all prospective service requesters. The FERC required each pipeline to establish an electronic bulletin board (EBB) through which

capacity being released could be posted and offered for sale and upon which prospective service requesters could bid, on-line, for such capacity.

Concerns about the proliferation of differing data elements and differing presentations among the more than 50 pipelines caused many in the industry to seek standardization of the capacity release data on EBB's. It was agreed that, rather than standardize the presentation of the data in a single system which would have to be common to all pipelines regardless of configuration and operating conditions, the goal would be to identify the minimum number of standard data elements required to identify capacity for sale through the capacity release market.

Prior to establishment of the Gas Industry Standards Board (GISB), the FERC called upon the industry to design the best way to implement this data standardization. What came to be known as the FERC EBB Working Groups 1 through 5 were established:

1. Working Group 1 worked on Capacity Release data;
2. Working Group 2 worked on Operationally Available Capacity and System-Wide Notice data;
3. Working Group 3 worked on Customer Specific data;
4. Working Group 4 worked on Communications Protocols; and
5. Working Group 5 worked on Common Location and Company codes.

The Capacity Release data sets that have been turned over to GISB are the output from the efforts of the Working Groups and GISB Business Practices Subcommittee - Market Initiation - Capacity Release Task Force.

### **The Capacity Release Process / Data Sets / EDI Transactions**

Following are the capacity release data sets and EDI transactions:

#### **Mandatory Download Datasets**

1. ~~Firm Transportation and Storage~~ Offer Download
2. ~~Firm Transportation and Storage~~ Bid Review Download
3. ~~Firm Transportation and Storage~~ Award Notice Download
4. ~~Firm Transportation and Storage~~ Withdrawal Download, which is subdivided:
  - A. ~~Offer Withdrawal~~
  - B. ~~Bid Review Withdrawal~~
  - C. ~~Award Notice Withdrawal~~
5. Operationally Available and Unsubscribed Capacity
6. System-Wide Notices
7. Response to Upload of Request for Download of Posted Data Sets
8. Replacement Capacity

#### **Mandatory Additional Datasets**

9. Upload of Request for Download of Posted Datasets
10. ~~Electronic Upload of Withdrawals, which is subdivided:~~

- A. ~~Offer Withdrawal~~
- B. ~~Bid Review Withdrawal~~
- 1110. ~~Offer Upload to Pipeline of Prearranged Deals (UPPD)~~
- 1211. ~~Offer Upload Quick Response UPPD Validation~~
- 1312. ~~Offer Upload UPPD Final Disposition~~
- 13. ~~Bid Upload~~
- 14. ~~Bid Upload Quick Response~~
- 15. ~~Withdrawal Upload~~
- 1416. ~~Note/Special Instruction~~

**Not Mandatory Additional Datasets**

- 1517. ~~Offer Upload UPPD Notification~~

**Business Conditional Additional Datasets**

- 1618. ~~Offer Upload UPPD Bidder Confirmation~~
- 1719. ~~Offer Upload UPPD Bidder Confirmation Validation~~

**Request and Response**

The manner in which data is requested from transportation service providers and transportation service providers inform trading partners of which requests have resulted in the transmission of requested data (as opposed to a no new data response) is through the request and response transactions. The request transaction (ANSI 846) is first sent by the trading partner, wishing to obtain information, to the transportation service provider. When the transportation service provider responds, it sends the response transaction (also ANSI 846) along with any data which meets the time and data type criteria identified in the request. The transportation service provider response indicates “Yes” where there is data meeting the request criteria, and “No” where there is no data meeting other request criteria. Transactions containing the available requested data accompany the response transaction.

**~~Firm Transportation and Storage~~—Offer Download**

Data sets 1 through 3 follow the logical progression of a transaction.

First, the party seeking to sell capacity (called the Releasing Service Requester or Releaser) offers capacity. In the offer, the Releaser details the quantity, time period, points, restrictions and pricing conditions associated with the offer. The ~~offer transaction~~ Offer Download (ANSI 840) contains the elements which are mandatory in the FERC approved data set, plus the optional and conditional terms displayed on the transportation service provider’s EBB and/or required to be supplied by the tariff. The ~~offer transaction~~ Offer Download is not used by the Releaser to offer capacity; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning an offer which has been made through the transportation service provider’s capacity release system.

### **~~Firm Transportation and Storage~~ – Bid Review Download**

Next, when the capacity which is being offered is available for bid, the party seeking to acquire such capacity (Bidder) makes a bid through the transportation service provider's EBB or by fax. In the bid, the prospective service requester details the quantity, time period, points, restrictions and pricing conditions associated with the bid. The ~~bid review transaction~~ Bid Download (ANSI 843) contains the elements which are mandatory in the FERC approved data set, plus the optional and conditional terms displayed on the transportation service provider's EBB and/or required to be supplied by the tariff. The ~~bid review transaction~~ Bid Download is not used by the Bidder to make a bid for capacity; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning a bid which has been made through the transportation service provider's capacity release system.

### **~~Firm Transportation and Storage~~ – Award Notice Download**

Next, the transportation service provider picks the winning bid based upon criteria selected by the Offerer and administered by the transportation service provider - this is called an Award. The winning bidder is called the "Acquiring Service Requester" or "Replacement Shipper". In the ~~award notice~~ Award Notice, the transportation service provider details the quantity, time period, points, restrictions and pricing conditions associated with the offer / winning bid ~~pair~~. The ~~award notice transaction~~ Award Download (ANSI 843) contains the elements which are mandatory in the FERC approved data set, plus the optional and conditional terms displayed on the transportation service provider's EBB and/or required to be supplied by the tariff. The ~~award notice transaction~~ Award Download is not used by the transportation service provider to make an award or to notify the parties to the winning bid; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning an award which has been made through the transportation service provider's capacity release system.

### **~~Firm Transportation and Storage~~ – Withdrawal Download**

Offers and bids can be withdrawn after posting and according to tariff specifications. As with all posted information, withdrawal data is immediately displayed to viewing users, but is not available to EDI trading partners unless specifically requested. As a result, a trading partner may have received data from a transportation service provider concerning a transaction which has been subsequently withdrawn - either by the originator of the transaction or by the transportation service provider. Withdrawals are requested together and each withdrawal is sent in a ~~withdrawal data set~~ Withdrawal Download, which is common to all withdrawals.

The data elements were determined to be mandatory in the FERC approved data set. This ~~withdrawal transaction~~ The Withdrawal Download is not used by either the Offerer or the Bidder to withdraw an offer or a bid; the ~~Electronic~~ Withdrawal Upload is used for that purpose. This transaction is used by the transportation service provider to transmit, to requesting trading partners, information concerning a withdrawn offer, bid or award which has been made available through the transportation service provider's capacity release system. The ~~withdrawal transaction~~ Withdrawal Download contains sufficient data to identify the transaction being withdrawn.

## **Electronic Withdrawal Upload**

The ~~Electronic~~ Withdrawal Upload is sent by a releasing shipper or bidder to the transportation service provider. The releasing shipper may use the ~~Electronic~~ Withdrawal Upload to notify the transportation service provider that the shipper wishes to withdraw a previously submitted offer. A bidder may use the Withdrawal Upload to notify the transportation service provider that the bidder wishes to withdraw a previously submitted bid.

This transaction is not used by the transportation service provider to transmit information concerning a withdrawn offer, bid, or award; rather the ~~Firm Transportation and Storage Withdrawal~~ Withdrawal Upload is used for that purpose.

Withdrawals of offers and bids are sent in a data set which is common to both types of uploads of withdrawals. The transaction contains sufficient data to determine which type of transaction is being withdrawn and allows identification of the specific offer or bid being withdrawn.

## **Operationally Available and Unsubscribed Capacity**

Releases of firm capacity are not the only types of capacity available to prospective service requesters. The transportation service provider can sell idle (un-nominated) firm capacity as short term (as little as 1 day) firm capacity, or interruptible capacity. These capacity types are called operationally available and unsubscribed capacity within the capacity release data sets. One such type of capacity is called unsubscribed firm transportation capacity (Unsubscribed FT), and the other is called interruptible transportation capacity (Operationally Available IT). When a transportation service provider has capacity available for sale, it is required by FERC regulations to post this available capacity so prospective service requesters may have the full suite of information concerning capacity which may be available when they make capacity purchase decisions. The ~~operationally available and unsubscribed capacity transaction~~ Operationally Available and Unsubscribed Capacity (ANSI 840) contains the elements which are mandatory in the FERC approved data set, plus the optional and conditional terms displayed on the transportation service provider's EBB and/or required to be supplied by the tariff. The ~~operationally available and unsubscribed capacity transaction~~ Operationally Available and Unsubscribed Capacity reflects the same level of specificity as to available capacity as is contained in other postings of available capacity. The ~~operationally available and unsubscribed capacity transaction~~ Operationally Available and Unsubscribed Capacity is not used by the transportation service provider to notify current or prospective service requesters; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning available FT and IT capacity.

## **System-Wide Notices**

In addition to the above data sets, the consensus of the Working Groups was that a system of standardized notifications as to non-service requester-specific (ie: system-wide) events which affect the operation of the transportation service provider and/or capacity release should be implemented. Information concerning curtailments, outages, maintenance, and such, is

supplied to trading partners through the ~~system-wide notices transaction~~ System-Wide Notices (ANSI 864). For the most part, the system-wide notice is a free-form text transaction which alerts trading partners to important events on the transportation service provider and the time frame within which a response (if any) is required from a service requester. The ~~system-wide notice transaction~~ System-Wide Notices is not used by the transportation service provider to notify current or prospective service requesters; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning non-service requester-specific events.

## **Replacement Capacity**

The ~~replacement capacity data set~~ Replacement Capacity contains information about capacity at firm points which is available because Releasers have released their right to firm capacity at a location. Certain transportation service providers have what is known as “full requirements” customers. These are transportation service providers where the capacity contracted by certain service requesters is equal to the physical capacity of a meter station. The rates that these same service requesters pay, on the other hand, is based upon a negotiated quantity per day number. This quantity per day number is the billing quantity. Contractually, this physical meter capacity quantity is an undefined quantity.

Once a portion of the capacity is released by one of these full requirements service requesters, the released capacity is subtracted from the billing quantity, with the remainder being the service requester’s available firm capacity at that location. The specific released capacity is transferred to the acquiring service requester, and the difference between the remaining billing quantity, plus released quantity and full meter capacity is called “~~Replacement Capacity~~ replacement capacity”. This replacement capacity exists only so long as some released quantity is in effect at the otherwise full requirements location.

The ~~replacement capacity data set~~ Replacement Capacity contains the points and quantities which are available for use by other acquiring service requesters. A bidding service requester may add one or more replacement capacity points to its bid for capacity which has been released by a service requester (often where the replacement capacity is unrelated to the releasing service requester’s capacity) in much the same way as a bidder for capacity on a non-replacement capacity transportation service provider may request that its transportation service provider add to its awarded capacity at a location which has unsubscribed FT available. The ~~replacement capacity transaction~~ Replacement Capacity (ANSI 843) contains the elements which are mandatory in the FERC approved data set, plus the optional and conditional terms displayed on the transportation service provider’s EBB and/or required to be supplied by the tariff. The ~~replacement capacity transaction~~ Replacement Capacity is not used by the releasing service requester to create or identify replacement capacity, nor is it used by Bidders to notify the transportation service provider of their desire for particular replacement capacity; rather it is used by the transportation service provider to transmit, to requesting trading partners, information concerning the inventory of replacement capacity which is then available through the transportation service provider’s capacity release system.

## **Note/Special Instruction**

The implementation guides provide multiple ways of accommodating the various lengths of explanatory notes, terms and conditions that can be found in Order 563 data sets (primarily in the Offer Download, Bid Download and Award Download ~~offer, bid review and award notice sections~~). Notes of short to medium length (to a maximum total size of 6,000 characters) may be placed in the specified field in each transaction. Long notes should be placed in the Note/Special Instruction (ANSI 864) ~~864 – note/special instruction transaction~~ for the most efficient processing.

### **Upload to Pipeline of Prearranged Deals Offer Upload and Bid Upload**

There are two distinctly different types of offers; prearranged and non-prearranged. Both types of offers use the Offer Upload. The Offer Upload, the Offer Upload Quick Response and the Offer Upload Final Disposition provide a mechanism for the releasing shipper or a representative of the releasing shipper to transmit the terms of an offer to the transportation service provider, and to validate and confirm the transaction.

~~Prearranged deals comprise the majority of released capacity transactions. The Upload to Pipeline of Prearranged Deals suite of transactions provide a mechanism for the releasing service requester or a representative of the releasing service requester to transmit the terms of an offer to the transportation service provider, and to validate and confirm the transaction.~~

~~The Upload to Pipeline of Prearranged Deals (UPPD) transaction~~ Offer Upload (ANSI 840) details the quantity, time period, points, restrictions and pricing conditions associated with the released capacity. Step two in this process occurs when the transportation service provider transmits the ~~UPPD-Validation transaction~~ Offer Upload Quick Response (ANSI 843) to the originating party. This informs the originator that the request passed edit checks, that an offer, bid and/or award number was assigned to the transaction and what, if any, subsequent steps need to be made by the originator. The Bid Upload (ANSI 843) enables a service requester wishing to bid on offered capacity the ability to communicate the terms of the bid. The Bid Upload Quick Response (ANSI 843) is sent from the transportation service provider to the originator of the bid as a direct response to the Bid Upload. This completes the cycle so that the transportation service provider can award the replacement contract (once the bid period ends, if the deal is biddable). The transportation service provider sends the Offer Upload Final Disposition (ANSI 567) to the releasing shipper that submitted the Offer Upload, the prearranged bidder (if any) identified in the Offer Upload and the winning bidder that submitted the Bid Upload.

However, for prearranged deals, which comprise the majority of released capacity transactions, there may be additional business conditional transactions exchanged before the capacity is awarded. Next, depending on the business practices of the Transportation Service Provider, the releasing party or transportation service provider may request confirmation from the prearranged deal bidder through the Offer Upload UPPD-Notification transaction (ANSI 840). This transaction gives the bidder all of the details submitted by the releasing service requester, with the assigned offer and bid numbers, and requests that the bidder send a confirming transaction to the transportation service provider. Depending on the business practices of the Transportation Service Provider, the Offer Upload UPPD-Bidder Confirmation transaction (ANSI 843) is sent to the transportation service provider by the prearranged deal bidder with a positive or negative confirmation of the bid. Because the

transportation service provider may not have been the source for the bidder's information, errors may occur, such as mismatched offer and bid numbers. Depending on the business practices of the Transportation Service Provider, the Offer Upload UPPD-Bidder Confirmation Quick Response Validation transaction (ANSI 824) is sent by the transportation service provider to the prearranged deal bidder to inform the bidder that the confirmation transaction passed edits. ~~This completes the cycle so that the transportation service provider can award the replacement contract (once the bid period ends, if the deal is biddable). Since the releasing service requester has been out of the communications loop while the transportation service provider awaits the bidder confirmation, the transportation service provider can now send the UPPD-Final Disposition transaction (ANSI 567) to the releasing service requester to inform the releasing service requester of the status of the deal.~~

### **Business Use of Capacity Release Related Transactions**

The capacity release data elements are the basic information that would be used to describe the capacity that is up for bidding, the deals being offered and accepted, and the general operational context at work within each transportation service provider.

Capacity release information sent to and retrieved from transportation service providers can be presented in a consistent format and order because the user has the application which formats the data according to the user's needs. That way, a user could design a computer program to process all of this information in any required manner - for example, to compare capacity being offered on several transportation service providers and pick out those deals which best meet the user's needs.

The capacity release transactions contain price, quantity, location, time, service requester and contract type data which are useful market information to those seeking to buy, sell or trade gas.

### **How Capacity Release and Electronic Commerce Fit Into the Natural Gas Business**

In order for the capacity release process to work, specific information about capacity being offered, bids, and awards must be posted on transportation service providers' EBB's so the process is open and fair, and so users of the system can shop for the deals that best suit their purposes.

Data may be transferred between business systems, in EDI format, either through the GISB EDM Standards, or optionally by direct, dial-up, telephone connection or through the services of one or more Value Added Networks (VAN's).