Common Codes of Transfer Points on Natural Gas Pipelines (GAS*CODE)

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Executive Summary

Dwights, under the direction of the INGAA Information Services Committee, completed the design, development, and commercial introduction of GAS*CODE, a data base of pipeline transfer/receipt points where nominations or gas title change can take place.

The first commercial release included over 30,000 transfer/receipt points provided by eighteen interstate pipeline companies. Geographically, GAS*CODE coverage, while not complete, includes 40 states and the Federal Offshore area.

Commercial introduction of GAS*CODE represents a significant step in providing gas industry trading partners a low cost method for increasing the use of electronic data interchange (EDI) to expedite gas transportation transactions and take advantage of opportunities to reduce administrative costs.

Introduction

The direct, computer-to-computer exchange of information, or electronic data interchange (EDI), is a rapidly growing method for exchanging critical business documents among trading partners. For the natural gas industry it is an essential tool that can help eliminate imbalances between gas receipts and deliveries, which have resulted in significant costs to producers and pipelines alike.

In 1987, INGAA and the Council of Petroleum Accounting Societies (COPAS) formed a joint task force to develop guidelines that would facilitate timely and accurate exchange of gas transportation transactions. That effort culminated in 1990 with the issuance of guidelines for completing natural gas transactions using EDI by INGAA, COPAS, and AGA. The guidelines include computer-to-computer exchange of gas transactions, named GAS*FLOW, that will work with computer systems developed by pipelines and shippers to manage the transportation business. An important element in the success of GAS*FLOW is access by shippers to frequently referenced pipeline locations at a low cost, on electronic media and from a single source.

The INGAA Information Services Committee (ISC) specified a method to capture the existing pipeline location codes and issued a request for proposal to 30 vendors. In April 1991 the ISC received 10 bids and selected Dwights Energydata, Inc. to build, operate, and market the database. INGAA retains ownership of the data and approval authority for subscriber fees.

Objectives

The INGAA member companies' agreement to develop, implement, and utilize the INGAA/DWIGHT GAS*CODE common code database of transportation transfer points is based on the following objectives:

- * Improve service to natural gas customers
- * Facilitate electronic data interchange and GAS*FLOW
- * Facilitate gas scheduling, monitoring, accounting, and balancing

Benefits

The INGAA/DWIGHTS contractual relationship for development of the GAS*CODE database offers the following benefits:

- 1. <u>Industry Control- INGAA</u> and its member companies will retain ownership of the database as well as approval authority regarding all subscription pricing.
- 2. <u>Low Cost-</u> Dwight's database experience as well as its existing hardware, software, and system support capabilities provide a platform for low-cost database development and operation. The common objective of INGAA and Dwight's is to maximize the gas industry's efficiencies by making the database widely available at a low cost.
- 3. <u>Ease of Use-</u> Because pipelines are providing their own actual transfer/receipt point data, there is no need for extensive subscriber conversion or verification of a new code schedule.
- 4. Readily Available- The GAS*CODE database is provided in a variety of media formats and subscribers will have a number of update frequency options. CD-ROM (compact disc-read only memory) technology will be used to expedite database storage, data search and retrieval, and updating capabilities.
- 5. <u>Direct Interface to GAS*FLOW-</u> The GAS*CODE database is structured to directly interface with the GAS*FLOW standard formats.

Future Activities

Dwights is actively soliciting additional receipt/delivery point data from other interstate pipeline companies, LDC's, and intrastate pipelines. In addition, future plans include consideration of incorporating Dwight's existing producing gas well information.

Activity Summary

The following summarizes the major activities associated with GAS*CODE during the past eleven months.

June/July 1991:

Database development is initiated. Specific contract terms are negotiated and finalized.

August 1991:

Dwights/INGAA contract is executed and database design and development efforts accelerated. Initial pipeline company data providers are identified.

September 1991:

Dwights develops a technical guide for data providers including record definitions and data item descriptions to assist data providers in supplying their transfer receipt point information.

October 1991:

Dwights completes all development tasks required for receipt of data, analysis, and CD-ROM product design. Marketing efforts, including press releases and direct mailing efforts are initiated.

November 1991:

Dwights receives over 20,000 transfer points from pipeline company data providers, initiates data analysis and completes data loading on CD-ROM database. Coding scheme is altered to accommodate API/PIDEX requirements.

December 1991:

Dwights completes prototype CD-ROM data base including software retrieval system. The name GAS*CODE is chosen, copyright executed, and formal brochure is completed.

January 1992:

Dwights conducts presentation of GAS*CODE pre-release to the INGAA IS-Subcommittee. Action plan for revisions/improvements is discussed and approved. GAS*CODE is demonstrated to attendees of the sixth annual Moving and Selling Gas by Computer Conference in Houston.

February 1992:

INGAA - Information Services Committee meets in Dwights Denver office to review GAS*CODE pre-release. Initial commercial release is scheduled for April 30, 1992.

March 1992:

Pre-release of GAS*CODE is distributed to data providers for data validation. Technical guide is revised and quick reference guide is produces and distributed.

April 1992:

Price schedule for GAS*CODE is approved by INGAA and major subscriber marketing effort is initiated.

Common Codes

The common code, defined and owned by INGAA, assigned by Dwights, and approved by the data providers, relies on the participation of each partner for successful implementation. The following provides information regarding the methodology associated with assignment, verification, and approval of common codes.

Common Code Assignment

The original INGAA RFP defined the common code assignment as follows:

The "common code" will be that designation utilized by the transporter present at that point. For interconnects, the common code will be designated by the operator of the interconnect. All points on any pipeline will be identified by the combination of the operating company's Dunn & Bradstreet (DUN's) number along with the operating company's designation code for the specific point.

During the Fourth Quarter 1991, at the request of API, INGAA pursued options to meet the needs of the PIDX members and provided and alternative coding assignment. The resulting common code assignment is defined as follows:

The INGAA common codes will be 16 digits long, 13 digits allocated for transportation operator codes and 3 digits assigned by INGAA or its designee to assure mutually exclusive codes. The three digits will be alphanumeric designations assigned in a sequential manner.

Subsequent decisions made at the February, 1992 INGAA IS Committee Meeting included further clarification of the transporter operator definition. Figures 1 through 6 illustrate different examples of assigning common codes.

Figure 1. One transporter at the source point.

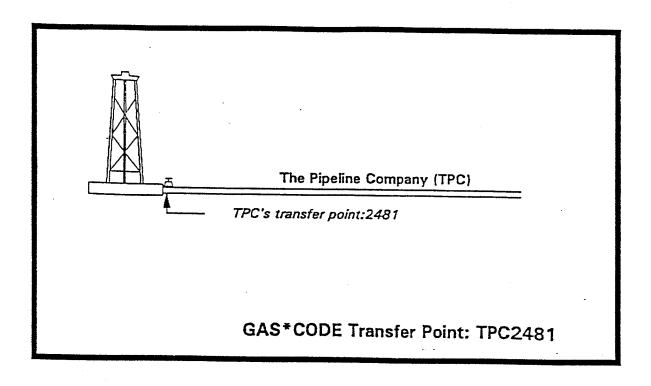


Figure 2. Two transporters at the source point.

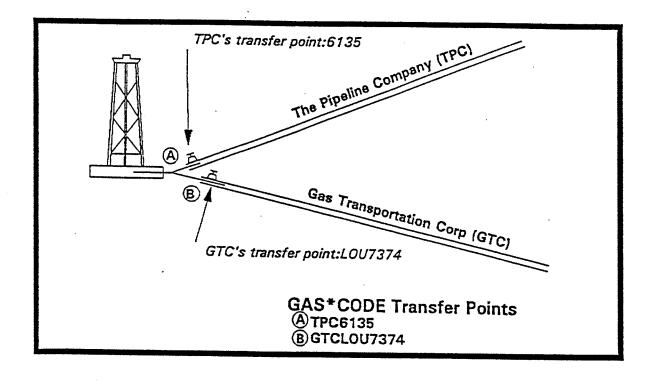


Figure 3. Gathering System

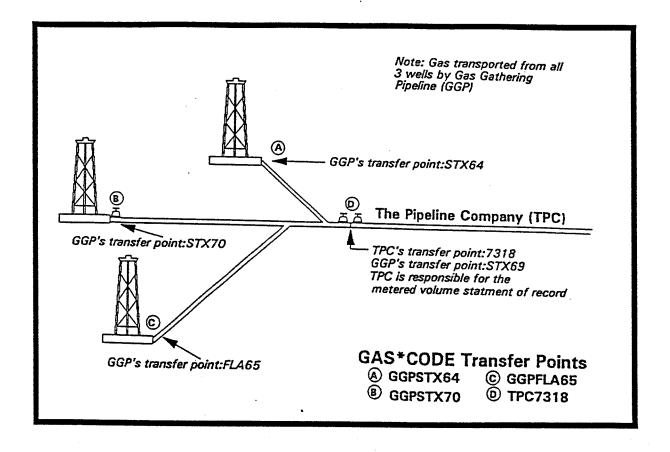


Figure 4. Gas Plant Tellgate

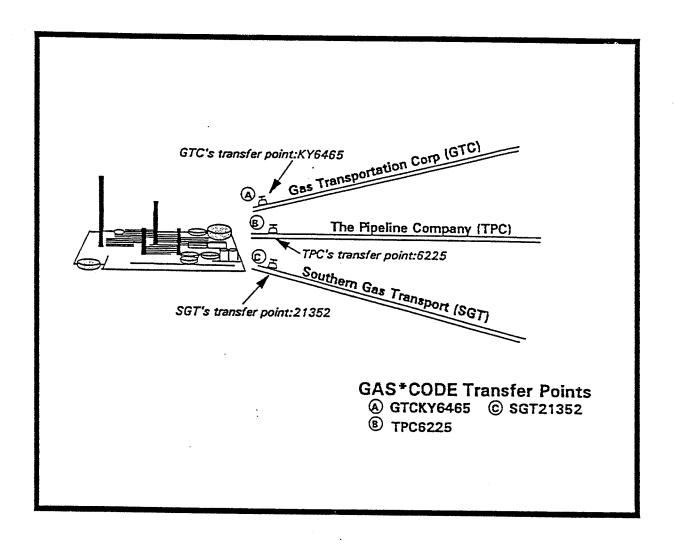


Figure 5. Interconnect of two transporters

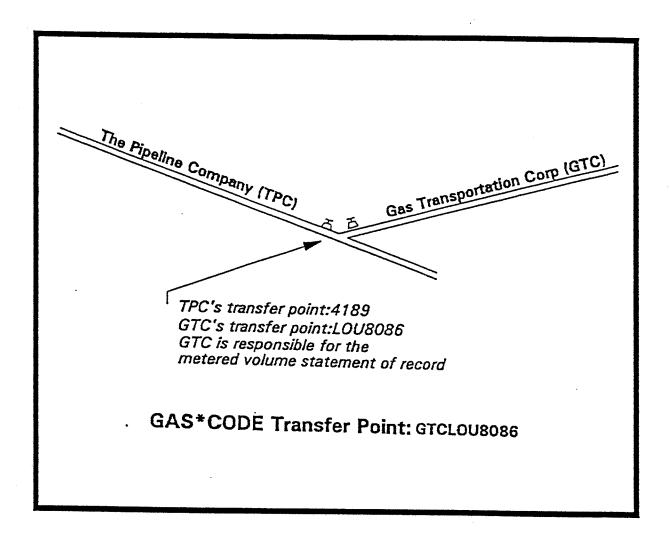
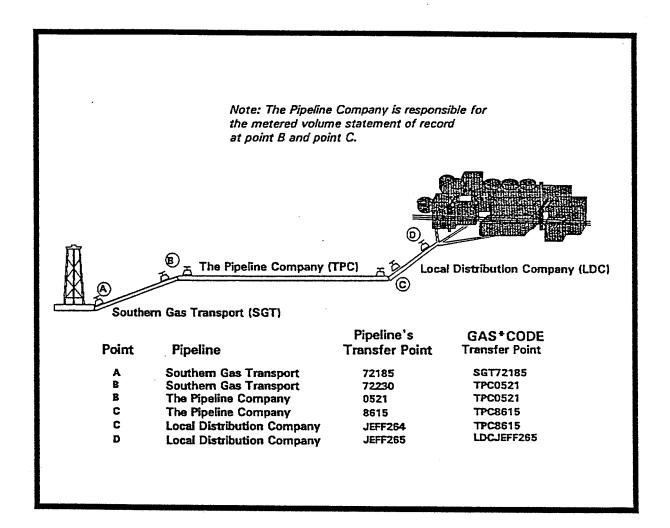


Figure 6. Source to Burner Tip



ommon Code Verification and Approval Procedures

Data supplied by providers to Dwights is processed and incorporated in the following monthly release of the database with a status of pending. The data provider verifies the accuracy of the information and determines if the common code assignment should be approved. To approve the common code assignment, the data provider provides Dwights with an update record that authorized approval of the common code assignment.

Dwights provides, within the CD-ROM product, a means by which the data provider can easily review the transfer point information and generate the record to authorize approvals. This procedure for submitting approvals is optional and data providers are not required to use it if they have other means of providing Dwights with approvals.

pdate Frequency

AS*CODE will be updated monthly to coincide with the nomination cycle. Each data provider will termine their own time table for providing data updates to Dwights, independent of Dwights and other ta providers. Updates received prior to the last business day of the month will be included in the next onthly release. The database will be updated based on the following schedule:

Typical Month, Weeks:	1	2	3	4
Update and Distribution Schedule Bid week (assumed) Final date to receive changes Update database Distribute database (tapes) Distribute database (CD-ROM)				

ata providers will be able to provide two types of additions to GAS*CODE:

UPDATE

This type will be the assumed default and is used to update specific records.

INITIAL LOAD

Remove and replace all records previously supplied. If Initial Load is requested, data must be supplied with header and trailer records.

eporting Options

'ith GAS*CODE, the user can select from a variety of options including state/county, transporter name, ansfer point name and number, and facility description, among others, to retrieve the desired ansfer/receipt point codes. The browse feature then lets the user quickly review the selected ansfer/receipt points and other related data on the computer screen before generating a final report.

eporting options with GAS*CODE include displaying the transfer point data on the screen, creating a ard-copy report, or exporting it to a file, in either fixed or comma delimited format, for use with AS*FLOW standard formats or other computer applications.

igures 7 through 10 illustrate the main menu selections and the browse, state/county, and individual ceipt point reports that are available.

Main Selection Menu

December 1991	INGAA/Dwights GAS*CODE CD-ROM			(V1.04	
Select	Report	Heip	Options	Exit	
State/county INGAA common code Transporter/Company Nam Name of transfer point Field name Lease name Offshore platform name Gas plant name API well number Well name Pending/approved filter		91 0 1248 0 0 0 0 0 0 0			
Total Selected		19			
Browse (# to rpt Clear all selection(s)	`	19)			

Press <F1> key for General Information Press <ESC> key to exit

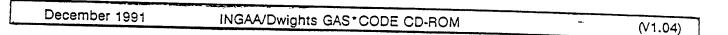
Figure 7

Browse Report

December 1991	INGAA/Dwights GAS*CO	DE CD-ROM	0/4 04)		
Browse Selected Transfe	er Points	Marked 19 of 19	(V1.04) (1)		
St County	Operator Name	Transfer Point Name			
Common Code/Status	Operator Duns #	Facility Type Description			
✓ LA ACADIA	TEXAS GAS TRANSMISSI RITCHIE				
N608145 P	115972101				
✓ LA ACADIA	TEXAS GAS TRANS	SMISSI TRANSCO-SO. RITCH	41 =		
N609353 P	115972101	D DELIVERY	į		
✓ LA ACADIA	TRANSCONTINEN"	TAL GAS BAYOU MALLET S	GREAT SOUTHERN		
DP00152 P	007933021	P SOURCE	(CILETI COOTTETIN		
✓ LA ACADIA	TRANSCONTINENT	TAL GAS CROWLEY FIELD			
DP00153 P	007933021				
✓ LA ACADIA	TRANSCONTINENT	TAL GAS EGAN			
DP00156 P	007933021				
✓ LA ACADIA		TAL GAS BAYOU MALLET S	(BOLLICH #4)		
DP00198 P	007933021	P SOURCE	(BOLLION #1)		
✓ LA ACADIA		TAL GAS RITCHIE EAST			
DP00597 P	007933021	P SOURCE			
✓ LA ACADIA		TAL GAS MERMENTAU WES	-		
DP00610 P	007933021	P SOURCE	•		
<enter> Toggles a mark. <esc> - Returns to menu <f1> - Help. Top of Data.</f1></esc></enter>	. < F5> Mark all p	Pt. report. < F6> - Clears oints. ne>, < End>, < PgUp>, < F			

Figure 8

State/County Report



State/County Selection

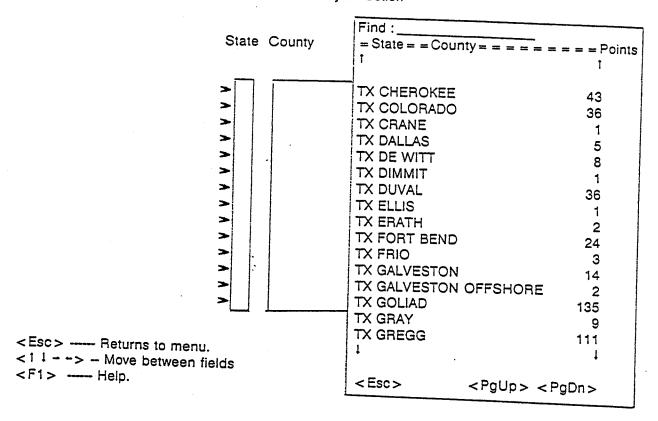


Figure 9

Individual Transfer Point Report

INGAA/Dwights

GAS*CODE

Report Date 5-May-1992

Transfer Point Report

Record Date: 920413

Common Code: N602885

Status: Active

Transportation Operator Name: TEXAS GAS TRANSMISSION CORPORATION

Transportation Operator DUNS #: 115972101

Transfer Point Name: UNION TEXAS-WELSH

Transfer Point Number: 2885

Facility Type Code: R

Facility Type Description: RECEIPT

State: LA

County: JEFFERSON DAVIS

Other Transporter Name:
Other Transporter DUNS #:

Other Transfer Point Name: Other Transfer Point Number:

Field Name: Field Number:

Lease Name: Lease Number:

Gas Plant Name: Gas Plant Number:

Platform Name: Platform Number:

Well Name:

API Number: * - -

Figure 10

AS*CODE Data Elements

rimary Data Elements

Transporter Name and Number

Transfer Point Name and Number

Facility Type

State

County

Cross-Reference Data Elements

. Field

Lease

. Platform

. Well

. Gas Plant

atabase Distribution

pdated monthly, the primary distribution of the GAS*CODE database will be via D-ROM. In addition, the data will also be made available in a flat file format on 9-track tape in a ariety of media formats, including:

1600/6250 BPI 9-track 8mm Exabyte Cassette IBM 3480 Cartridges ANSI Standard ASCII or EBCDIC

ustom data retrievals will be available through a staffed phone service.

nitial Data Providers

~ ANR

Columbia Gas Transmission

El Paso Natural Gas

KN Energy Natural Gas Pipeline Northwest Pipeline

Panhandle Eastern

Questar Pipeline Southern Natural Gas

Tennessee

Texas Gas

Transco

United Gas

Valero

Williams

Williston Basin