

# ANR PIPELINE ICE USER GUIDE



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# ICE User Guide

## I. Introduction

ICE is an TransCanada Corporation application developed to display flowing gas data from ANR Pipeline Company (ANR) Supervisory, Control, And Data Acquisition (SCADA) collection routines and TransCanada Corporation Corporate Measurement System (CMS). ICE presents a "buffer" of measurement data, both real-time and historical, using Internet and related technology. Data may be viewed one-at-a-time or in groups, may be downloaded, or graphed. ICE employs contemporary conventions such as keyboard shortcuts, menus; tool bars, window manipulation, and "save as" capability.

Six months of both CMS and SCADA data are available in ICE.

The purpose of this document is to provide insight into ICE functionality. Please refer to ICE application "Help" for additional assistance. Application support may be obtained by calling the ANR Pipeline Company Help Desk at 800-8-ASK-ANR (800)827-5267.

Both real-time and historical data are considered confidential and may not be published or distributed externally without the written consent of TransCanada Corporation. TransCanada Corporation assumes no responsibility for the accuracy of the real-time data accessed and reserves the right to change historical data a contingent on error discovery and Gas Industry Standards Board (GISB) standards.

## II. ICE Login

ICE is located on the Internet at <http://www.ANRPL.com>. Click on the "ICE" hyperlink to access ICE.

Provide User ID and Password to access ICE.

## III. Meter

### Meter Report (M Rpt)

"M Rpt" or "Meter Report" provide the user with five (5) days of data either by meter number (meter code) or by user set. "User set" is a user-built set of data points, which are grouped together for viewing convenience. For example, a user set may contain differential pressure or Decatherm data for six meters of particular interest. *Refer to Appendix A for data point definitions.* The beginning date specified in the month/day/year select boxes determine which five days display.

Real-time data consists of selected data retrieved from ANR gas flow computers (GFCs) by query polls which are like "snapshots" of flow. Real-time data is then loaded to ICE every fifteen minutes reflecting. View real-time data by selecting "M Rpt", "M Spot", "M 48 Hr", "M Hr Avgs", "M Day Avgs", and "M Stats" from the toolbar or from the menu selection under "Meter".

All real-time data is un-scrubbed meaning that ANR Measurement Analysts have not validated the data in terms of mechanical meter error corrections, Prior Period Adjustments, erroneous flow time corrections, or other correction of invalid volume factors. *Since this data is un-scrubbed, use with discretion.*

To use, enter a meter number in the select box and press the enter key or single-click the "Retrieve" button.

Column definitions: "Spot" is the last "snapshot" data retrieved from the Gas Flow Computer (GFC). "Hr Avg" is the last hourly average, which may be the same as the last spot, depending on flow characteristics. "Today's Avg" is a weighted average of today's data, which may be close to the last hourly average, depending on flow characteristics.

Each of the dated columns contains point data for the meter selected.

To sum "M Rpt" data, go to "Meter Set", "User Meter Set" and choose "+" (or "-" to subtract) under "Sub/Add" to summarize selected data points.

#### B. Mtr Spot Rdgs (M Spot)

"M Spot" or "Meter Spot Rdgs" displays instantaneous spot or "snapshot" data in 15-minute averages loaded from SCADA. Thus the user can see data as recent as a few seconds ago if the 15-minute load just occurred. The frequency at which we poll the GFC will determine whether spot data is updated every fifteen minutes. If the GFC is polled once-an-hour, spot data will be refreshed once every four 15-minute spots.

Selecting "M Spot" or "Meter Spot Rdgs" downloads data pertaining to only those meters under current contract rights. Select the data point by single-clicking the data row.

When requesting a new screen with a data point currently selected, ICE passes the data point from the existing screen to the requested screen to save entering the data point again.

The list window may be enlarged for viewing convenience by "dragging" the list window border to the desired size. However, enlarging the list window decreases the size of the data window.

#### C. 48 Hourly Mtr Rdgs(M 48 Hr)

"M 48 Hr" or "48 Hourly Mtr Rdgs" displays yesterday and today's hourly average data relative to the data point selected in the list window.

#### D. Mtr Hrly Avg (M Hr Avgs)

"M Hr Avgs" or "Mtr Hrly Avgs" displays hourly averages similar to "M 48 Hr" or "48 Hourly" except for the option of choosing a production day. Choosing a production day more than three days in the past displays data, which has been validated by ANR Measurement Analysts and may not be representative of actual billing volumes or parameters.

Mtr Hrly Avg is similar to "M48 Hr" or "48 Hourly Mtr Rdgs" in respect to the data view; however, a month, day, and year range provide historical production day selection.

#### E. Mtr Day Avgs (M Day Avgs)

"Mtr Day Avgs" or "M Day Avgs" displays information similar to "M48 Hr" or "48 Hourly Mtr Rdgs" except it is rolled up to a daily figure; historical selection is available.

#### F. Mtr Stats (M Stats)

"Mtr Stats" is a monthly view by day including minimum, maximum, and average values.

## IV. Download/Graphs

### A. Mtr Download/Graphs

Meter Downloads/Graphs allow the user to view data graphically and manipulate and view data in spreadsheet and format. NOTE: Downloading is available in all data view by using the menu command "file, save, as" and choosing the type of file required. Figure 12

Select the frequency and select "Retrieve" to load data. NOTE: Spot Rdg is very detail data pertaining to today and possibly yesterday, depending when the request was submitted and does not graph well due to the amount of data.

Once the data has loaded, select "Show Graph". View the graph and various options for changing how the data is displayed.

### B. Mtr Column Download

#### C. "Multiple meter download"

Allows the user to obtain data for up to 10 data points and arranges the data in column format.

## VI. CMS Vol

CMS Volumes display volumes from the Corporate Measurement System (CMS). These volumes may have been "scrubbed" by ANR Measurement Analysts for all known errors in measurement data.

CMS volumes are scheduled to load to ICE once a day. January 5<sup>th</sup> production day measurement data is loaded into CMS on January 6<sup>th</sup> between 10:30 A.M. and 12:00 A.M., then into ICE at 12:30 P.M. and 4:30 P.M. that evening, January 6<sup>th</sup>.

## VI. User Sets

User sets are user-defined groups of data, which may be view together for convenience. For example, Dp on several meters may be associated in one User Set, Pressure, in another.

Lists are available to "Meter Report" and "Mult Mtr Download".

## VII. User Settings

Default viewing parameters may be set by the user. For example, meter code may be selected as the preferred choice for viewing meter data. Go to "User Settings" and change the button selection from "Index No" to "Meter Code".

## VIII. Save-as

"Save-as" allows saving of data in various formats such as Excel or text.

## Appendix A

### Description of meter\* codes

<b>Meter Code</b>	<b>Meter Code</b>	<b>Description</b>
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		Instantaneous flow rate Mcf at meter 512144 This may not be representative of daily accumulated flow in dynamic conditions
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5121441	<b>-DP</b>	Differential Pressure on Tube #1
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5121442	<b>-DP</b>	Differential Pressure on Tube #2
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512144	<b>-BTU</b>	British Thermal Units (BTU)
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512144	<b>-CPR</b>	Customer Pressure
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512144	<b>-DAD</b>	Daily Accumulated
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512144	<b>-DAM</b>	Daily Accumulated Mcf
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512144	<b>-GRA</b>	Specific Gravity
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512144	<b>-GT</b>	Gas
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512144	<b>-PR</b>	Static Pressure
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Note: DAD and DAM are not averaged over the time scale viewed. These are calculated in the GFC and ICE simply displays the value. DP, BTU, CPR, GRA, GT, and PR will be averaged from 15-minute data to hourly and then from hourly to daily.

“Meter” is the ANR designation for a custody transfer location including all tubes, and/or devices at that location.