

COMMODITY PRICING, LOAD BALANCING AND COST ALLOCATION  
METHODOLOGIES FOR NATURAL GAS DISTRIBUTORS  
IMPLEMENTATION OF THE NEW PGVA RIDER METHODOLOGY

On September 18, 2009, the Ontario Energy Board (“OEB” or the “Board”) issued its Decision and Order in the Methodologies For Commodity Pricing, Load Balancing And Cost Allocation For Natural Gas Distributors proceeding, EB-2008-0106 (the “GRAM Decision”). In that Decision, the Board directed Enbridge Gas Distribution Inc. (“Enbridge” or “the Company”) to upgrade its operating practice and computer systems in order to establish the business process of calculating Mean Daily Volume (“MDV”) on a weather normalized basis, and to enable the provision of re-calculating the MDV during the contract term, as and when appropriate.

In that Decision, the Board stated:

The Board finds that Union’s existing approach to establishing DCQ on a weather normalized basis and the re-establishment of DCQ when a customer’s BT contract experiences material changes during the contract term is appropriate, since it acts to minimize imbalances in the BGA.

Similarly, the Board finds EGD’s proposal to adopt Union’s approach and establish the MDV on a weather-normalized basis, and re-establish it during the contract term to be appropriate.

The Board orders EGD to file the details of its MDV proposal at its earliest convenience for the Board’s review and approval. The changes to the MDV shall be implemented in 2011. With respect to the costs of implementing the changes to the MDV, the Board directs EGD to record these costs in a deferral account, the prudence and disposition of which will be decided in a subsequent proceeding.

In accordance with the Board’s Decision, the Company has: (1) undertaken a comprehensive review of the impacts to business processes and the supporting IT system (“EnTRAC”), as well as related computer system(s) modifications; (2) developed a proposed solution; and (3) held stakeholder consultations to validate the suitability of the proposal.

The purpose of this letter is to:

- Provide details of Enbridge’s MDV Re-establishment Proposal, the approach to weather normalization, an updated cost estimate and implementation schedule.
- Request the Board’s approval to proceed with the design and implementation.

## DETAILS OF THE PROPOSAL

### MDV Re-establishment

MDV is defined as the volume of gas that a gas vendor/end-use customer, under a T-service arrangement, is contractually obligated to supply to the Company on each day. Currently, it is the Company's practice that the MDV is calculated and established on a Pool term basis, based on the composition of accounts in the underlying Pool. The MDV does not change during the Pool term regardless of whether the composition of accounts related to the Pool has changed.

In the Company's proposal for MDV re-establishment, the MDV of a flowing Pool will be recalculated periodically based on certain conditions. A Pool is considered flowing once the Pool term commences and gas deliveries are being received. If the recalculated MDV changes by more than a defined threshold, the new MDV value would take effect at a defined future effective date. The principal benefit of this change is that the Pool's MDV deliveries are more reflective of the current makeup of customers within a Pool.

The periodic re-establishment of MDV would be applicable to all Pool types including both customers and agents, and would be an automatic process that cannot be deselected or opted out of. The MDV calculation and re-establishment process would occur monthly.

On the last day of the month, the MDV for each flowing Pool will be calculated based upon the Pool's current customer composition. If the change in calculated MDV exceeds the threshold value of +/-4 GJ's, the MDV is deemed to have been re-established. This re-established MDV would become effective on the first day of the next calendar month. The threshold of +/-4 GJ's has been proposed as it is identical to Union Gas' threshold of materiality for MDV re-establishment.

After the initial establishment of a Pool's MDV, the Pool is next evaluated for re-establishment one night prior to the Pool term commencement date. Once a new MDV is established, it is valid for the remainder of the Pool term or until the MDV is once again re-established. The last MDV calculation for re-establishment would occur two months prior to the Pool term expiry date.

The MDV of a flowing Pool is re-calculated and re-established only if a Pool composition change has occurred since the current MDV was established and the tolerance threshold is met. A Pool composition change can be triggered by the following:

- Account Drop
- Account Finalization
- Mid-term Enrol
- Vendor to vendor switch

- Reconnection of Service (ROS)
- Change in Consumer Location (CCL)

In the absence of a Pool composition change, a variation in a consumer's actual consumption versus its original forecasted consumption, would not trigger the Pool MDV re-establishment process.

If there are no active accounts associated with a Pool on the day the MDV is re-calculated, the MDV will not be changed, and the current effective MDV will remain unchanged. However, the Pool will be staged for termination and a sixty-day notification of Pool termination will be issued to the contracting party.

During MDV re-establishment, each account's volumetric contribution to the MDV is determined as outlined below:

- MDV for pre-existing general service rate accounts (Rates 1, 6, 9) would not be re-calculated and will remain unchanged.
- The MDV for pre-existing Large Volume Distribution Contract ("LVDC") accounts would not be recalculated and remains unchanged.
- The MDV for a new general service account would be calculated based upon the normalized historical consumption for the remaining months of the Pool term.
- The MDV for new LVDC accounts would be calculated using the contract estimates coincident with the remaining months of the Pool term.
- LVDC accounts that renewed or terminated after the commencement date of the Pool will not be considered in the MDV re-calculation.

For newly added accounts, the contribution to the recalculated MDV would be based only on the account's estimated consumption for the balance of the Pool term.

For accounts no longer associated with a Pool, the entire volumetric contribution of the account(s) to the MDV would be removed during the re-establishment process.

The current system permits accounts to be added to Pools that are flowing subject to volumetric restrictions. The process for adding accounts, outside of the renewal period is referred to as "quasi adding" accounts. Under this mechanism the Pool's MDV is not amended until the renewal of the Pool. The purpose of "quasi adding" is to allow customers an opportunity to in-fill Pools with new accounts to manage the effect of customer attrition on the Banked Gas Account ("BGA").

With the introduction of MDV re-establishment the quasi adding process will be replaced with a process called Mid Term Enrolments. Mid Term Enrolments will have no limitations for the number of accounts or their associated volumes that may be added to a flowing Pool. However, accounts enrolled in this manner will be subject to the standard enrolment business rules as found in the EnTRAC Business Transaction Rules.

For general service accounts added as Mid Term Enrolments, the MDV calculation is based on the most recent historical consumption (normalized). For LVDC accounts enrolled as Mid Term Enrolments, contract estimates will be used.

Currently, gas nominations are entered into EnTRAC once and stand for the balance of the Pool term, notwithstanding any load balancing transactions. Given the potential for periodic MDV changes, Enbridge proposes to streamline the nomination process. Under the proposal, nominations may now be entered and edited up to two days prior to the commencement of a month and would stand until either the Pool's MDV is re-established or the Pool term expires.

When the MDV is re-established, existing nominations are rescinded coincident with the effective date of the re-established MDV. New nomination volumes are automatically generated by the system and take effect on the re-established MDV effective date. EnTRAC will be modified to allow customers to identify Pools for which the MDV has been re-established and a new nomination volume generated.

Load balancing functionality for suspension requests will be limited to a maximum length of one month, but cannot cross over a month end. Each suspension request will be validated against the effective MDV of the respective month. The system will allow for the editing of suspension/make-up requests up until two business days prior to the effective date. Makeup functionality is otherwise unaffected.

Under the terms of the Company's Rate Handbook, Pools are subject to a BGA disposition tolerance of twenty times the MDV at the end of the Pool term. As MDV will no longer be a static number Enbridge proposes to adopt a percentage tolerance of 5.5% for BGA disposition, similar to Union Gas's method which uses a tolerance of 4%. The value of 5.5% was chosen as a proxy to the current twenty times MDV tolerance. The tolerance is calculated as the sum of each month's MDV deliveries times 5.5% and divided by the number of months in the Pool term. The resulting value is then multiplied by twelve to arrive at the Pool term tolerance.

#### Weather Normalization

EnTRAC will be modified to account for weather in the determination of the MDV. During the initial establishment of MDV, EnTRAC will apply a weather normalization factor to consumption estimates for all general service accounts (Rates 1 and 6). The calculation will consider each account's baseload and actual heating consumption parameters and

will compare the values to Enbridge's Board-approved budgeted degree days for the respective Pool term.

The proposed process of weather normalizing MDV is consistent with Enbridge's gas supply practices. The process of weather normalization will not apply to Large Volume Distribution Contract accounts.

In the proposed method, a daily baseload is determined by totaling gas consumption for the months of July and August and dividing by sixty-two (number of days in July and August). The months of July and August are used because they are two non-weather sensitive months. The daily baseload is converted into a monthly baseload volume by multiplying the number of days in each month by the daily baseload. The monthly baseload is then deducted from the respective month's actual historical consumption and divided by the actual degree days that were experienced during the period to determine a 'heat load use' per degree day. The 'normalized consumption' is then calculated as 'heat load use' per degree day times the monthly budget degree days plus the monthly baseload.

A sample calculation is shown below in Figure 1

Historical Consumption												
Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-08	Nov-08	Dec-08	Acct MDV
500	500	420	350	150	100	98	82	75	155	275	485	9.00
Daily Baseload = (Jul Consumption + Aug Consumption)/62 = 2.90												
Monthly Baseload = Daily Baseload * No of days in month												
90	81	90	87	90	87	98	82	87	90	87	90	
Heating Load = Historical Consumption - Monthly Baseload												
410.00	418.71	330.00	262.90	60.00	12.90	0.00	0.00	0.00	65.00	187.90	395.00	
Actual Degree Days												
807.90	597.50	519.10	306.20	149.10	50.50	4.30	8.80	56.60	290.70	355.10	620.70	
Heat Load Use per Degree Day = Heating Load / Actual Degree Days												
0.51	0.70	0.64	0.86	0.40	0.26	0.00	0.00	0.00	0.22	0.53	0.64	
Budget Degree Days												
654.00	591.00	518.00	309.00	151.00	30.00	4.00	8.00	71.00	236.00	397.00	577.00	
Normalized Consumption = Heat Load Use per Degree Day * Budget Degree Days + Monthly Baseload												Norm MDV
421.90	495.44	419.30	352.40	150.76	94.76	98.00	82.00	87.10	142.77	297.17	457.19	8.00

Figure 1: Weather Normalization Calculation

### Estimated Project Costs

The total estimated cost of this project is \$3,697,730. A high level breakdown of the costs is provided below:

To date Costs:	\$150,000
Remaining Costs:	
Design, Development, and Implementation	\$2,754,920
Infrastructure	245,000
Administration	135,000
Contingency	380,960
Applicable Taxes	<u>31,850</u>
<b>Total</b>	<b>\$3,697,330</b>

A more detailed summary of the estimated costs of the project is included in Appendix B. This cost estimate is within the range of the high level cost estimate provided during the proceeding. In keeping with the Board's order the Company has created a deferral account, Mean Daily Volume Mechanism D/A ("2010 MDVMDA"), to capture the costs of implementing the required changes. The amount will be brought forward for clearing in a future proceeding at which time interested parties will have an opportunity to examine the prudence and disposition of the account balance.

### Project Timing and High Level Plan

The targeted implementation date for this project is the first quarter of 2011.

- First Quarter of 2010
  - Mid Level Design
  - Marketplace Consultation
- Second Quarter of 2010
  - Board Filing
  - Detailed Design
  - Contract Review
- Third Quarter of 2010
  - Coding
- Fourth Quarter of 2010
  - Testing
- First Quarter 2011
  - Deployment

### Stakeholder Consultations

Enbridge hosted a stakeholder consultation on February 23, 2010 to review the proposed MDV re-establishment and weather normalization solution. Participants in the consultation included agents, marketers, end-use customers, and consultants acting on behalf of customers. Enbridge received positive support from participants in the session and confirmation that the solution delivers on the expected benefits. Subsequent to the session, Enbridge sent the presentation to all attendees as well as to customers not in attendance, requesting review of the proposal and feedback. No comments were received in response to this communication. The presentation as given is attached (Appendix D) with a list of attendees (Appendix C).

In summary, Enbridge believes that the proposed solution is in keeping with the Board's order. The Company has conducted a careful and thorough review of the required changes and is confident the cost estimate is reasonable, and finally that the stakeholder consultation demonstrates that the solution meets the needs of the marketplace. Based on this Enbridge is requesting the Board's approval to proceed with implementation of the proposed solution as defined herein.

### Attachments

Appendix A	Glossary of Terms
Appendix B	Estimated Project Costs
Appendix C	Listing of Attendees: Market Consultation
Appendix D	Project Presentation as given at Market Consultation

Appendix A  
Glossary of Terms

**Account Drop**

A drop request is a Service Transaction Request ("STR") outlined in the Electronic Business Transactions ("EBT Standards Document") Appendix D to the GDAR Service Agreement. The drop request transaction is the opposite of an Enrol Request Transaction. The drop request is used to terminate an active Enrol STR with the existing vendor on the requested effective date. On the requested drop request effective date, the existing vendor will no longer be providing the consumer with gas competitive services. A drop request can be initiated by either the consumer or the existing vendor.

**Account Finalization**

An account finalization invokes the generation of a Termination of Service ("TOS") (and in some cases a Change Consumer Location ("CCL") Service Transaction Request ("STR")). A TOS is an STR outlined in the EBT Standards Document Appendix D to the GDAR Service Agreement. The TOS generated by the Distributor, is used to inform the current and pending vendors that a consumer's gas distribution service is terminating and the consumer's account is to be closed. A TOS transaction can result from direct contact with a consumer, indirect or implicit contact with a consumer (e.g., force out), or as a result of a distributor's internal processes (e.g., write-off of an account due to non-payment).

**Banked Gas Account**

The record of the amount of gas delivered by the Applicant to the Company in respect of a terminal location (credits) and of volume of gas taken by the applicant at the terminal location (debits).

**Change Consumer Location ("CCL")**

A CCL is an STR outlined in the EBT Standards Document Appendix D to the GDAR Service Agreement. This STR is intended to allow a consumer to retain its relationship with its existing vendor at its new premises when the consumer moves within the distributor's service territory.

**Mid-term Enrol**

An Enrol Request is an STR outlined in the EBT Standards Document Appendix D to the GDAR Service Agreement. This STR is intended to facilitate the consumer signing up for Gas Competitive Services supplied by a vendor. The vendor will submit an Enrol Request to the distributor to notify the distributor of the effective date that they will be providing Gas Competitive Services to the consumer. A mid-term Enrol is a unique Enrol



from the perspective that the target Pool that the vendor is attaching the consumer to, is currently flowing and the consumer is being added to the Pool after its commencement date.

### **Pool**

Means a group of one or more end-use customers who have been associated by the customer for the purpose of the delivery of gas by the customer to the Company and the redelivery of that gas by the Company to the customer for a period of time, and has attached to it an identifier, start and end dates, a point of acceptance, one or more terminal location and an aggregate MDV.

### **Reconnection of Service ("ROS")**

An ROS is an STR outlined in the EBT Standards Document Appendix D to the GDAR Service Agreement. This STR is generated by the distributor to inform the current vendor that a consumers' Gas Distribution Services, and consequently Gas Competitive Services, are reconnected at the consumer's location subsequent to TOS notification.

### **Vendor to Vendor Switch**

A Vendor to Vendor Switch is an STR outlined in the EBT Standards Document Appendix D to the GDAR Service Agreement. This STR is intended to facilitate the process of a consumer changing from one vendor arranging their gas competitive services to another vendor. The process is initiated by the new vendor submitting an Enrol Request to the distributor. The distributor notifies both the current vendor and the new vendor that the Enrol Request involves a vendor to vendor switch, and the process is subjected to a 30 day contest period. Only during the contest period, the consumer, the new vendor or the current vendor may notify the distributor that the consumer requests to stay with the current vendor and the Enrol Request is to be terminated. If the switch is not contested and there are no requests from the customer to return to distributor system supply, then the switch will take place on the intended effective date within the Enrol Request.

Appendix B  
Estimated Project Costs

**Project Plan**

Project	March 1 2010 - April 30 2011	61 weeks
Design	March 1 2010 - May 28 2010	13 weeks
Development	May 31 2010 - Sept 17 2010	16 weeks
Testing	Sept 20 2010 - Feb 18 2011	20 weeks
Implementation	Feb 26 2010	
Warranty Period	Feb 26 2011 - April 30 2011	7 weeks

**Mid-Level Design and Project Development** \$ 150,000

**Resources**

	Weeks		
Project Manager	52	\$	199,680
EnTRAC Technical Designers	52	\$	305,760
EnTRAC Data Architect/Hyperion	52	\$	189,280
Infrastructure Designer	50	\$	140,000
Subject Matter Experts (Integration)	56	\$	604,800
SQL Programmers	50	\$	400,000
Java Programmers	50	\$	300,000
Contract Backfills for EGD Staff	50	\$	615,000

**Sub-Total** \$ **2,754,520**

**Miscellaneous**

Legal (Recontracting Gas Delivery Agreements)	\$	120,000
Market Consultations	\$	5,000
Team Expenses	\$	10,000

**Sub-Total** \$ **135,000**

**Infrastructure**

Production Database Server Upgrade		
CPU upgrade	\$	60,000
Memory Upgrade 16GB	\$	10,000
Test Servers	\$	75,000
Disk Space Upgrade	\$	100,000

**Sub-Total** \$ **245,000**

**Contingency**

**Sub-Total** \$ **380,960**

**Applicable Taxes** (13% on Infrastructure only)

**Sub-Total** \$ **31,850**

**Total Estimated Project Cost** **3,697,330**

Appendix C  
List of Attendees: MDV Project Market Consultation

<b>NAME</b>	<b>COMPANY</b>
Ryan Lang	360 Energy Inc.
Ayshe Mustafa Vieira	Access Gas Services
Moe Hajabed	Active Energy ULC
Sankalpa Khatiwada	Active Energy ULC
Val Young	Aegent Energy Advisors
Margaret Barsi	Ag Energy
Michelle Vieira	Ag Energy Co Op
Shane Xu	Blackstone Energy Services Inc.
David Karpuk	Buy Energy Canada Inc.
Nadia Georgis	CAPREIT
Hao Yuen	City of Toronto, Facilities & Real Estate
Jason Stacey	Consultant
Karen Cooke	Direct Energy
Javier Belalcazar	Direct Energy
Murray Young	Direct Energy Business
Marcia Kall	E2 Energy Inc.
Theodora Nedelea	E2 Energy Inc.
Mike Parkes	ECNG Energy
Michael Nigro	Energy Advantage
Michelle Pollard-Brown	Energy Advantage
Heather Freill	Energy Advantage
Mark Beattie	Energy Source
Elitsa Brown	Energy Source
Julie Purvis	GO Energy
Knishka Banerji	Just Energy
Louai Bahajaj	Just Energy
John Guerriero	Navicomm Energy Group Inc
Ian Robertson	Planet Energy
John Belgue	RiteRate
Nancy Hammond	Shell
Mark Davis	Summitt Energy
Martin Finnerty	Summitt Energy
Scott Gutcher	Summitt Energy
Norman Cabrera	Superior Energy
Vikki Afelskie	Superior Energy Management
Linda Wainewright	TEAM
Patrick Boyer	Union Gas Limited
Diane Dutton	Enbridge Gas Distribution
Brenda Vari	Enbridge Gas Distribution
Ian Macpherson	Enbridge Gas Distribution
Karen Morrison	Enbridge Gas Distribution
Andrew Welburn	Enbridge Gas Distribution
Bruce Manwaring	Enbridge Gas Distribution

NAME	COMPANY
Jeff Sim	Enbridge Gas Distribution
Avery Rhijnsburger	Enbridge Gas Distribution
Rob DiMaria	Enbridge Gas Distribution
Diane Simmons	Enbridge Gas Distribution
Maryanne Gordon	Enbridge Gas Distribution
Julie Alexander	Enbridge Gas Distribution

Appendix D  
MDV Project as Given at Market Consultation



## Monthly MDV Re-Establishment Preliminary Overview

February 24, 2010

# Project Schedule

- First Quarter of 2010
  - High Level Design
  - Marketplace Consultation and Board Filing
- Second Quarter of 2010
  - Detailed Design
  - Contract Review
- Third Quarter of 2010
  - Development
- Fourth Quarter of 2010
  - Testing
- First Quarter 2011
  - Deployment

# Agenda

- Guiding Principles
- Contracting Changes
- Gas Supply Changes
- Financial Changes





## Guiding Principles

- Changes should be necessary to support monthly MDV re-establishment
- Harmonize with Union Gas where possible
- MDV re-establishment is not intended to facilitate load balancing
- KISEn (Keep It Simple EnTRAC)



## Contracting Changes

- Who will monthly MDV re-establishment be applicable to?
  - Not an option that can be elected or declined
  - Applicable to all Pools (both Western and Ontario Point of Acceptance)
  - Applicable to all MSA parties (both Agent and Customer type MSA)



# Contracting Changes

- When is the MDV re-calculated and effective?
  - Re-established MDVs are effective the 1<sup>st</sup> of a calendar month
  - Re-established MDVs are determined 1 calendar month in advance of the effective date
  - Re-established MDVs is deemed to be effective until the end of the Pool term
  - The earliest point that a new MDV could be re-calculated would be on the Pool commencement date effective the beginning of the second month of the pool term.
  - The last point that a new MDV could be re-calculated would be 2 calendar months prior to the Pool term expiry date effective the beginning of the last month of the pool term.

## Contracting Changes

- What will trigger a Pool's MDV to be re-established?
  - A change in the Pool's account composition
    - Includes implemented EBTs such as Drops, mid-term Enrols, Vendor to Vendor switches, Termination of Service (TOS), Reconnection of Service (ROS), and Change Customer Location (CCL)
  - A +/- 4 GJ change between the Pool's active MDV and the re-calculated MDV



## Contracting Changes

- When would a Pool's MDV not be re-established?
  - If there are variances between forecasted and actual consumption
  - If there is a pending pool termination effective on or before the effective date of the re-established MDV



# Contracting Changes

- What Accounts in a Pool will have their MDV refreshed?
  - The MDV for a Pool is calculated at the account level and then aggregated to the Pool level
  - The MDV for accounts included in the Pool's current MDV will not be refreshed
  - For implemented account additions since the last MDV was established
    - General Service accounts will use the latest historical consumption for the remaining months of the pool term
    - Large Volume Distribution Contract accounts will use the contract estimates for the remaining months of the pool term
  - Accounts with a Drop transaction that was implemented after the last MDV was established will be excluded from the next Pool MDV calculation



## Contracting Changes

- How do Dropped or Finalized accounts impact MDV re-establishment?
  - Accounts that have an implemented Drop or TOS will be excluded from the MDV re-calculation
- How do Transfers impact MDV re-establishment?
  - Transfers from one Pool to another Pool are only permitted on the anniversary date for both the source and target pool



# Contracting Changes

- How do mid-term Enrols impact MDV re-establishment?
  - Concept of quasi-adding account is replaced with mid-term Enrols
  - No limit to the number of accounts
  - No limit to the volume related to the accounts
  - FT Turnback rules will apply to mid-term Enrols
  - Effective on the 1<sup>st</sup> of the calendar month
  - Enrol must be implemented to be included in the MDV re-calculation
  - Consumption estimate used for MDV calculation will be for the period of one month after the Enrol effective date to the Pool term expiry date



## Contracting Changes

- Will there be any changes to the current options that may be elected when the MDV is manually established for a pending Pool?
  - Instead of electing, EnTRAC will automatically replace null historical consumption with a standard consumption profile for all rate 1 and 6 accounts
  - The ‘+/- 5 GJ swing’ election is no longer available
  - The +/- 10% consumption estimate adjustment will be available when the MDV is manually established for a pending pool, but will not be applied for MDV re-calculations by EnTRAC once the Pool is active.

# Contracting Changes

- Will there be any changes to the Pool Composition Report (PCR)?
  - Additional PCRs will be available to correspond with any new MDV established during the active pool term.
  - The existing structure will be maintained, however new columns will be added to the right to provide additional information
    - Historical Consumption (monthly, non-normalized, Null values )
    - Historical Degree Days (non-normalized)
    - Baseload factor
    - Weather normalized Degree Days (monthly)
    - Heat Load user per Degree Day (monthly)
    - Weather normalization factor (monthly)
  - The weather normalized consumption estimates will shown in the current contract estimated fields in the original left hand side of the PCR

# Scenario : MDV Calculation

02/21/2010

07/11/2010

08/01/2010

April 09 PCR

Locked

Account 1 Drop

effective

Account 4 and 5 mid-

term Enrolled effective

Apr 09  
PCR

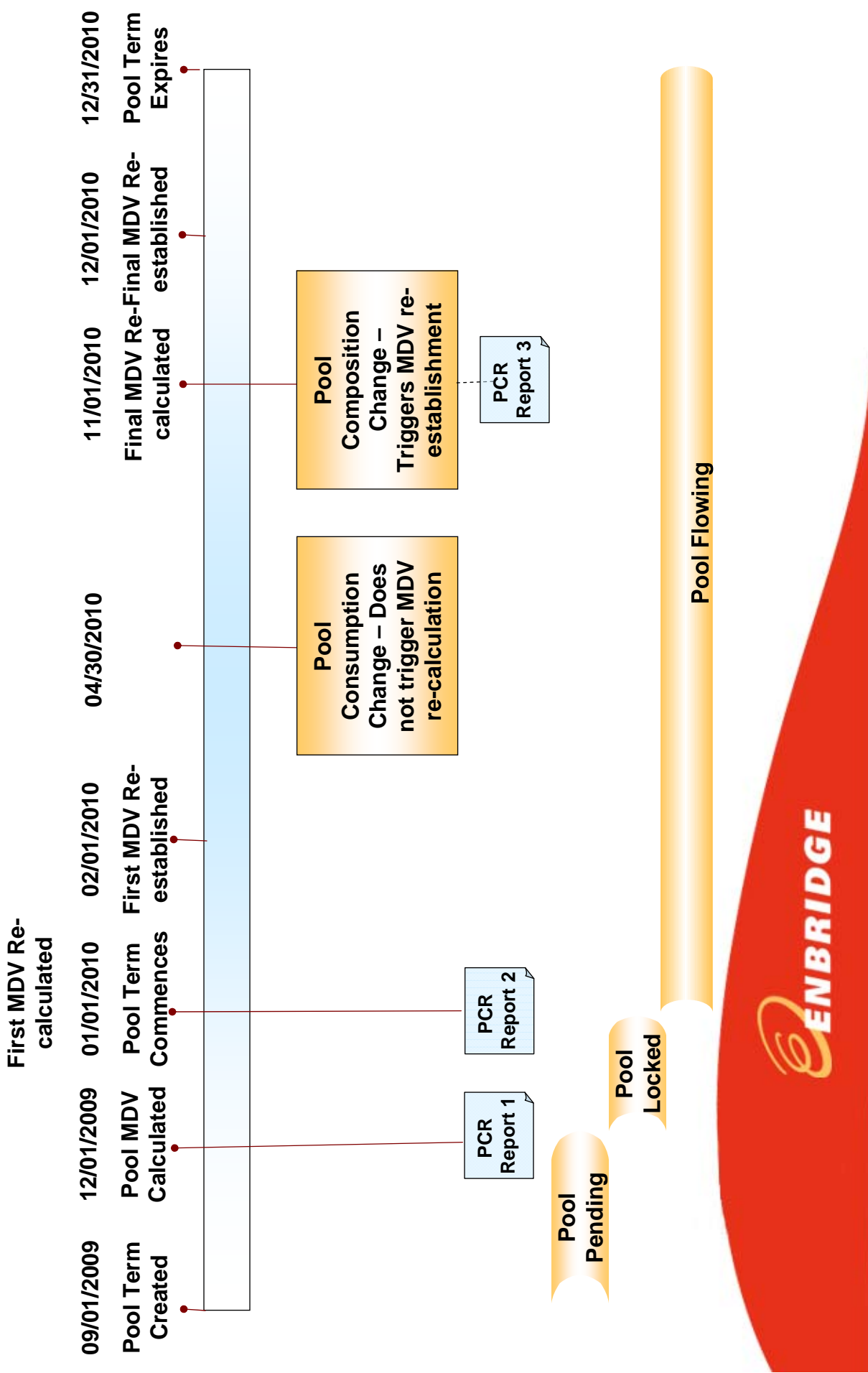
Sep 09  
PCR

Apr 09 PCR		EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	MDV
ACCOUNT	NUMBER	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Pool MDV						
	1	298	154	128	8	-8	9	4	287	346	779	600	716							9
	2	629	123	210	42	98	65	53	231	382	518	176	446							8
	3	615	197	410	56	103	73	95	275	478	818	412	743							12
		Pool MDV																		
		29																		

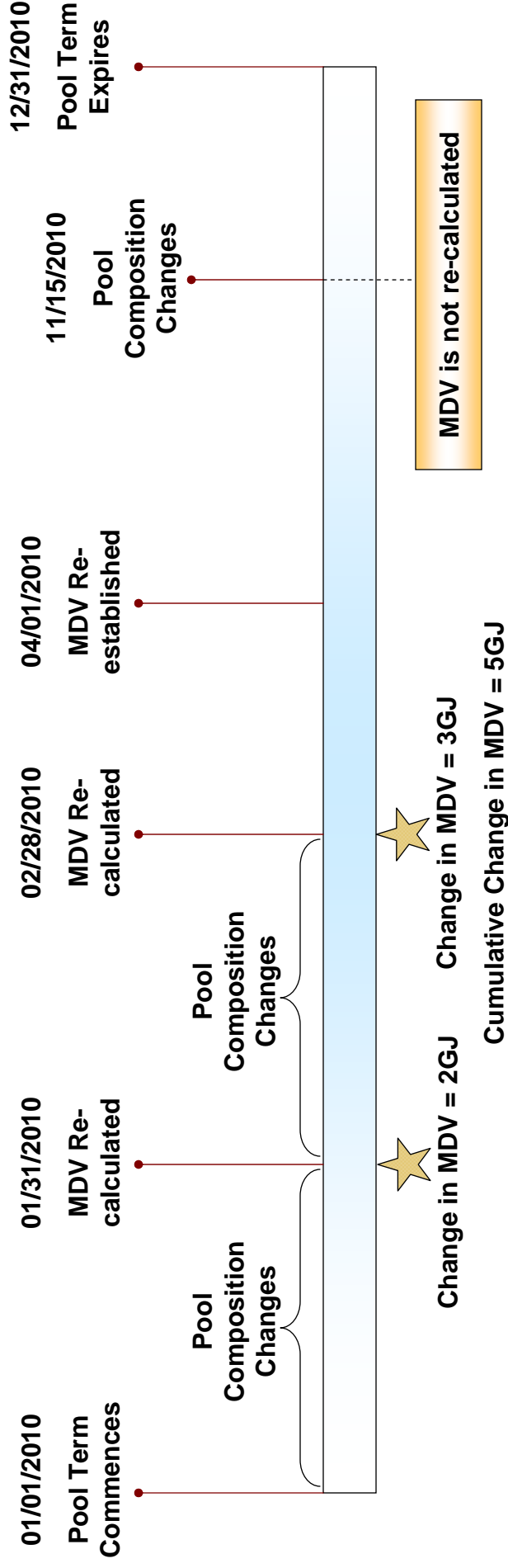
Sep 09 PCR		EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	EST	CONS	MDV
ACCOUNT	NUMBER	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Pool MDV						
	1																			
	2	629	123	210	42	98	65	53	231	382	518	176	446							8
	3	615	197	410	56	103	73	95	275	478	818	412	743							12
	4						85	96	110	352	765	653	558							12
	5						125	175	224	325	425	398	346							10
		Pool MDV																		
		42																		



# Scenario : Life Cycle of a Pool



# Scenario : MDV Re-Establishment Trigger



**Pool Composition Changes:**  
Account Drop / Finalization  
Mid-term Enrolls  
Vendor to vendor switch  
ROS / CCL

Pool Flowing



# Weather Normalization

Historical Consumption												
Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-08	Nov-08	Dec-08	Acct MDV
500	500	420	350	150	100	98	82	75	155	275	485	9.00

Daily Baseload = (Jul Consumption + Aug Consumption)/62 = 2.90

Monthly Baseload = Daily Baseload * No of days in month											
90	81	90	87	90	87	98	82	87	90	87	90

Heating Load = Historical Consumption - Monthly Baseload											
410.00	418.71	330.00	262.90	60.00	12.90	0.00	0.00	0.00	65.00	187.90	395.00

Actual Degree Days											
807.90	597.50	519.10	306.20	149.10	50.50	4.30	8.80	56.60	290.70	355.10	620.70

Heat Load Use per Degree Day = Heating Load / Actual Degree Days											
0.51	0.70	0.64	0.86	0.40	0.26	0.00	0.00	0.00	0.22	0.53	0.64

Budget Degree Days											
654.00	591.00	518.00	309.00	151.00	30.00	4.00	8.00	71.00	236.00	397.00	577.00

Normalized Consumption = Heat Load Use per Degree Day * Budget Degree Days + Monthly Baseload											Norm MDV	
421.90	495.44	419.30	352.40	150.76	94.76	98.00	82.00	87.10	142.77	297.17	457.19	8.00



# Gas Supply Changes

- Impacted Areas
  - Nominations
  - Load Balancing (Suspensions)
  - BGA Report



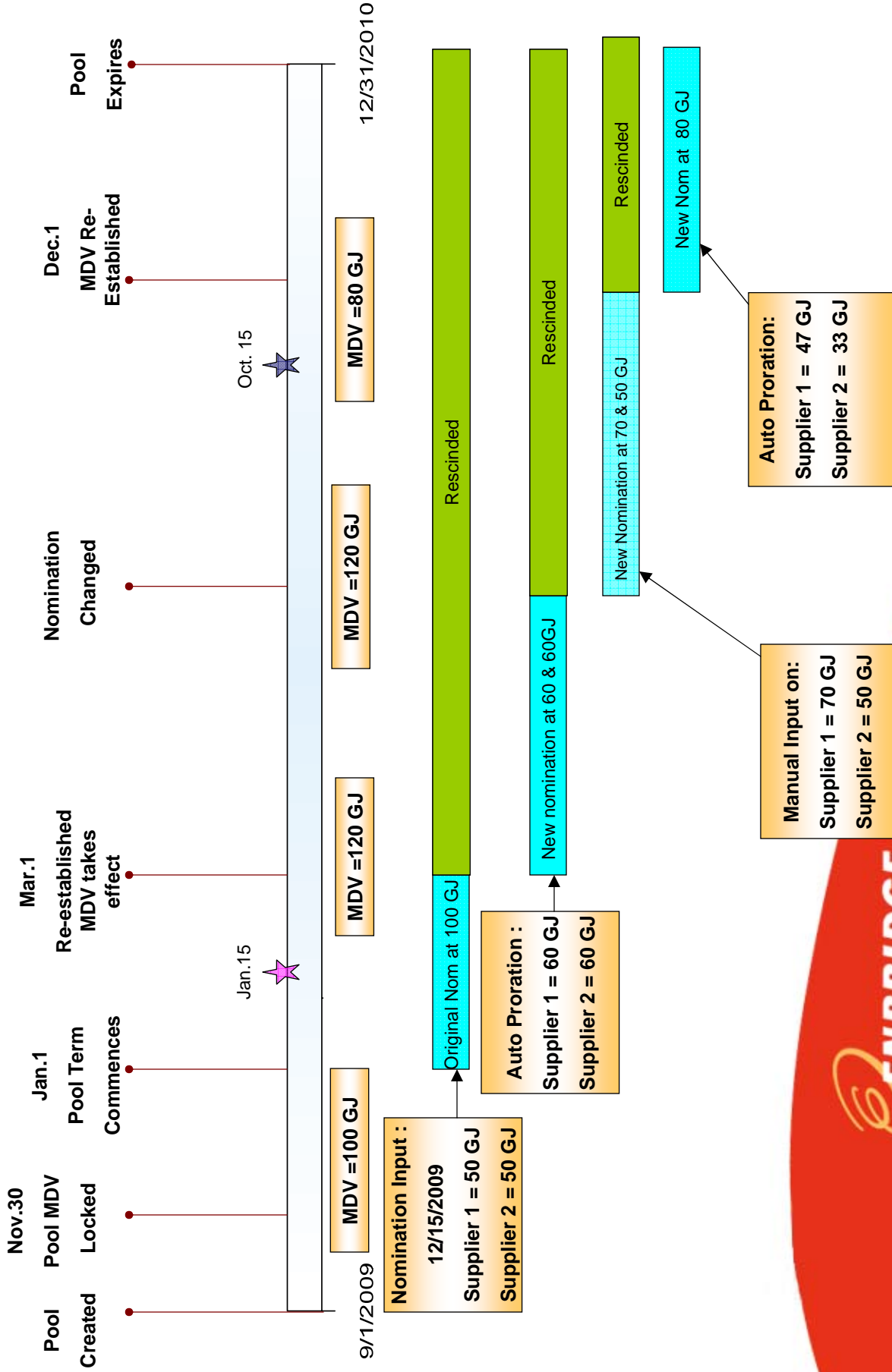
# Nominations

- Nominations for a pending pool can be entered up to two days prior to beginning of new month.
- Nominations remain valid until the expiry of the pool term unless,
  - MDV re-established.
  - New nomination entered by customer.
- Nomination volumes become effective coincidently with the re-established MDV effective date.
  - For pools with multiple suppliers, EnTRAC applies existing supplier ratio to the new nomination
  - Available to be manually input/updated by customers
    - Alert sent to the MSA Party informing of the rescind and pro-ration.
- New Nomination Summary screen
  - All declined/accepted nomination requests, associated with a pool term, would be available for the external user to view.





# Scenario : Nominations

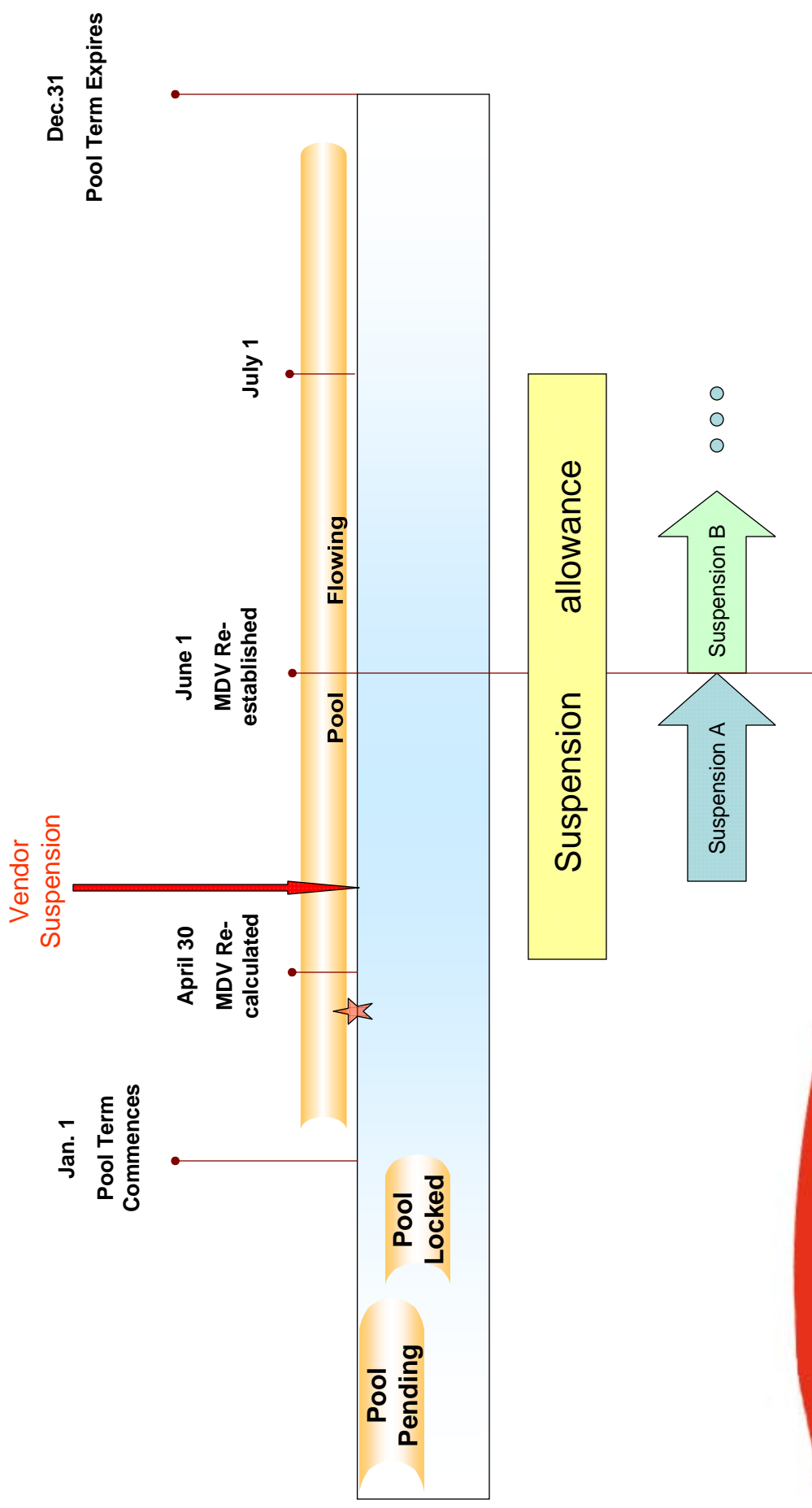


# Load Balancing (Make Ups and Suspensions)

- Make Ups and Suspensions cannot cross over a month end.
  - Suspension requests must be validated against the effective MDV of the concerned month.
- Load Balancing requests can be edited up to two days prior to the requested effective date.
- All declined/accepted suspension/make-up requests associated with a pool term available for the external viewing.
- No change for Title Transfers



# Scenario : Load Balancing - Suspensions



## Banked Gas Account (BGA)

- Load Balancing Overview screen, BGA Summary screen and BGA Report to be synchronized, viewable 9<sup>th</sup> day of month.
  - Load Balancing Overview screen and BGA Summary screen synchronized at all times.
- Tolerance = 5.5% of Averaged Annual Volume
- BGA calculations use MDV effective at the time of calculation.
  - Forecasted BGA will consider a re-established MDV for future months.



# Disposition of BGA Balances

- Sum of all MDV's for contract term X 5.5%

Month	MDV	Days	Volume
Jan.1	100	31	3100
Feb.1	100	28	2800
Mar.1	120	31	3720
Apr.1	120	30	3600
May.1	120	31	3720
Jun.1	120	30	3600
Jul.1	120	31	3720
Aug.1	120	31	3720
Sep.1	120	30	3600
Oct.1	80	31	2480
Nov.1	80	30	2400
Dec.1	80	31	2480
Sum			38940
Tolerance	5.5%		
			2142

# Financial Changes

## Internal MDV PPG at Pool Start

Acct	m3	PPG price	Est Bill
A1	500	0.35	\$ 175
A2	1000	0.30	\$ 300
A3	200	0.32	\$ 64
A4	400	0.34	\$ 136
<hr/>			
	2100		\$ 675
<hr/>			

## MDV ReEstablished First Time

Acct	m3	PPG price	Est Bill
A1	500	0.35	\$ 175
A3	200	0.32	\$ 64
A4	400	0.34	\$ 136
A5	500	0.30	\$ 150
A6	800	0.28	\$ 224
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	2400		\$ 749
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## MDV ReEstablished Second Time

Acct	m3	PPG price	Est Bill
A1	500	0.35	\$ 175
A4	400	0.34	\$ 136
A5	500	0.30	\$ 150
<hr/>			
	1400		\$ 461
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Wgtd Avg PPG Pool Price \$ 0.321 (\$675/2100) Wgtd Avg PPG Pool Price \$ 0.312 (\$749/2400) Wgtd Avg PPG Pool Price \$ 0.329 (\$461/1400)

Wgtd Avg WAVR Price \$ 0.350  
for mthly billings

Wgtd Avg WAVR Price \$ 0.340  
for mthly billings

Pymt Based on WAVR price of \$0.35  
as it is within 10% of MDV PPG price

Pymt Based on Wgtd Avg PPG Price \$0.312  
as WAVR price is GT 10% tolerance

Pymt Based on Wgtd Avg WAVR Price of \$0.34/m3  
as WAVR price is within 10% tolerance



Questions?

