

Large Filing Separator Sheet

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Joint Stipulation

36. POLR Responsibilities – SSO Phase

1. VEDO is currently the Provider of Last Resort (POLR) for the VEDO system.
2. The POLR responsibility as currently assumed involves temporarily providing supply to Choice customers in the event of a Choice Supplier default. The Choice Supplier Agreement and relevant tariff sheets hold the defaulting Choice Supplier financially responsible. Eventually, the customers of a removed Choice Supplier will be assumed by non-defaulting Choice Suppliers or revert to sales service.
3. Because currently Choice suppliers almost exclusively maintain their own capacity rather than VEDO-released capacity to serve Choice customers, VEDO does not have recall rights to the Choice Suppliers' capacity in the event of a default. Also, VEDO does not retain additional capacity to provide this backup service. Instead it would rely upon the capacity and supply currently used to provide GCR sales service in the event of a Choice Supplier default; or if necessary, acquire additional temporary capacity and supply or city-gate deliveries. However, in a change to the current Choice Program, under the provisions in section 19, Choice Suppliers would take mandatory capacity assignment of VEDO capacity equivalent to 75% of their Pools' loads, such that VEDO would have recall rights to a large portion of Choice Suppliers' capacity.
4. In the SSO Phase, the POLR responsibility will expand to include temporarily providing supply to cover SSO tranche loads in the event of an SSO Supplier default. The SSO Supplier Agreement and relevant tariff sheets will hold the defaulting SSO Supplier financially responsible.
5. Defaulting Suppliers will be required to reimburse VEDO and other Suppliers for any incremental POLR costs incurred. Any incremental costs not recovered from defaulting suppliers will be included in the Exit Transition Cost Rider (see section 40).
6. The following approach to POLR will be used during for any Supplier defaults during the SSO Phase:
 - a. VEDO, SSO Suppliers, Choice Suppliers, and Large Transporters/ Pool Operators would all be involved.
 - b. VEDO will act as POLR Coordinator, identifying the need for POLR supply and notifying the non-defaulting SSO and Choice Suppliers when such need arises.
 - c. In the event of supplier default, VEDO will take the following short-term action with regard to obtaining POLR supply:
 - i. SSO/Choice Suppliers collectively will provide supply to meet POLR needs, using their individual VEDO-released TCO storage inventories. The withdrawn storage inventory will be subsequently replaced with the replacement cost assessed to the defaulting Supplier.
 - ii. If VEDO determines that the daily quantity of gas needed due to supplier default(s) may affect the reliability of the system, an OFO will be issued, to ensure that Large Transporters/Pool Operators are not under delivering versus their Transport Customer usages during the POLR period.

36. POLR Responsibilities – SSO Phase (Cont’)

- iii. Next, as soon as possible, all transportation and storage capacity released to the defaulting Supplier will be recalled by VEDO who will use it to meet some portion of the immediate needs of the defaulting Supplier's customers. VEDO will claim the defaulting Supplier's storage inventory as needed to meet the defaulting Supplier's customer loads.
 - iv. VEDO will fill any remaining shortfall through acquiring additional temporary capacity and supply or city-gate deliveries.
 - v. VEDO will coordinate the provision of POLR service for the remainder of the billing month in which the default occurs, and the subsequent month, or until an alternate solution is effectuated.
- d. In the event of Supplier removal, VEDO will take the following action with regard to an alternate solution:
- i. If a Choice Supplier defaults, per the Choice Tariff, VEDO will offer non-defaulting Choice suppliers the option of assuming the customers of the defaulting supplier. If no takers, the customers will revert to sales (SSO) service.
 - ii. If an SSO Supplier defaults or non-defaulting Choice Suppliers do not assume the customers of a removed Choice Supplier:
 1. The existing SSO Suppliers loads will be increased to cover the defaulted load on a pro rata basis. SSO Suppliers will be paid for the new load at the same SSO Price per MMBtu as established in the initial auction for their own supply tranches. Incremental load will be limited to 50% of initial tranche size.
 2. For the portion of load quantity greater than 50% of initial load tranche size, that load will be assigned to a new SSO Supplier based on an accelerated auction process.
 3. If there are only three winning bidders in the SSO auction and one Supplier defaults during the term, the two remaining SSO Suppliers will both receive a 50% portion of the defaulting Suppliers load, transport capacity and storage capacity assigned to them.

37. Transition from GCR to SSO

1. Pipeline transportation and storage capacity to be released to SSO Suppliers will be calculated by approximately the 20th of the month prior to the first month of flow, based on the Capacity Release Percentages (CRPs).
2. SSO/Choice Supplier DDQs will be posted to VEDO's EBB two days prior to the start of the SSO Phase, in addition to the min/max storage injection/withdrawal limits and daily inventory level requirements.
3. The GCR rate will be replaced with the SSO rate, and SSO customers' cycle month usages will be prorated, as of the SSO Initiation Date.
4. Suppliers' receivables will be shown on the SSO Suppliers' statements rendered about 25 days after the month that they were billed to the customers, meaning there is approximately a one month lag before Suppliers receive the payment on their billing/payment statement.
5. Further, the receivables paid to SSO Suppliers for the first month of SSO service will reflect only a prorated portion of the cycle billing for that month, about half, in that a portion of the cycle billing would represent sales under the GCR rate for the month prior to SSO Initiation.

38. Operational Flow Orders (OFO)

1. VEDO may issue an Operational Flow Order (OFO), in its reasonable discretion, as specified in this section, upon determination that an action is required in order to:
 - a. alleviate or prevent conditions which threaten the integrity or reliability of Company's gas system
 - b. maintain the system in balance
 - c. maintain adequate storage inventory balances
 - d. assure deliveries of gas supplies by Suppliers to serve their customers' loads
 - e. adhere to the various interstate pipeline companies' balancing requirements, as stated in their FERC approved gas tariffs
 - f. direct Suppliers to different city-gates or institute different city-gate delivery allocations due to system maintenance or system constraints
 - g. any other condition warranting a change to delivery requirements
2. An OFO may be issued on a non-discriminatory basis to all Suppliers delivering gas to VEDO's city-gates, all Suppliers within individual Programs, or an individual non-complying Supplier, when necessary in Company's sole judgment.
3. Company will post the OFO notice via their EBB notifying Supplier(s) of the following:
 - a. Start date of the OFO
 - b. End date of the OFO
 - c. Expected duration if no end date is specified
 - d. Specifics delivery requirements and or restrictions (i.e. no deliveries can be accepted at a particular city-gate due to maintenance; Supplier out of compliance with their storage min/max limits or inventory balance requirements; a Cold Weather OFO restricting deliveries less than the Supplier's DDQ; a Warm Weather OFO restricting deliveries greater than the Supplier's DDQ; etc.)
4. Violations of OFO requirements will be subject to a \$35.00 charge per Dth for any volumes over or under the specified restriction.
5. Company will make every effort to give 24 hours notice of OFO's. If the risk of a potential future critical issue is identified, VEDO will attempt to post a Potential OFO notice to their EBB. However, VEDO reserves the right to in unforeseen circumstances to issue an OFO at any time to mitigate potential system issues with expediency without prior notice.

39. Pipeline Delivery Point Imbalances

1. As meter operator, VEDO has Operational Balancing Agreements (OBA) in place with most Pipelines that outline the terms for handling delivery point imbalances. At these points, the Pipelines remotely control the deliveries to the VEDO system based on the collective nominations to that point. Differences between the actual deliveries through the Delivery Point meters and the nominations to those meters will be managed by VEDO as shown below.
2. Texas Gas – Lebanon Point
 - a. No OBA in place.
 - b. Over/under delivery imbalances are netted and cashed out on a monthly basis.
3. Texas Eastern – Red Lion Point
 - a. OBA in place.
 - b. Imbalances are managed to minimal levels through TETCO Gas Control adjusting flow.
 - c. Month-end imbalance carries month to month.
 - d. Imbalance is not cashed out.
4. ANR – Derby and Red Lion Points
 - a. OBA in place.
 - b. Imbalances are managed to minimal levels through ANR Gas Control adjusting flow.
 - c. Month-end imbalance carries month to month.
 - d. Imbalance is not cashed out.
5. Panhandle – Glen Karn, Hollansburg, and Rural Points
 - a. OBA in place.
 - b. Imbalance is managed to minimal levels through VEDO gas control nominating gas on or off the OBA balance.
 - c. Month-end imbalance carries month to month.
 - d. Imbalance is not cashed out.

40. Exit Transition Cost Rider

1. A new Exit Transition Cost (ETC) Rider will be established to recover Merchant Exit Transition costs from all SSO/SCO and Choice customers. (See Proposed Tariff Sheets)
2. The new Rider will recover incremental SSO and SCO Phase implementation costs including but not limited to the following: (See Attachment 40A for estimates)
 - a. IT
 - b. Call Center
 - c. Billing
 - d. Education programs
 - e. Other implementation costs
3. The new ETC Rider will also recover/pass back:
 - a. GCR variances remaining as of the implementation of the SSO Phase,
 - b. any stranded gas supply costs, including migration costs from VEDO's Choice program, if any
 - c. any incremental POLR costs not recovered from a defaulting SSO Supplier,
 - d. any imbalance costs not recovered from a Large Transporters/Pool Operators,
 - e. gas costs incurred by Company when diverting Customers' transportation gas quantities during a curtailment (see Tariff Sheet No. 70, paragraph 11.B1.(9)),
 - f. other costs determined to be applicable to all SSO/SCO and/or Choice customers.
4. All recoverable costs will be estimated for ratemaking purposes and will be reconciled to actual costs and recoveries.
5. Detailed accounting records will be maintained and will be reviewed in an annual ETC Rider audit that will be provided to Commission Staff.
6. Quarterly, the ETC Rider rate will be updated to reflect actual costs and variances.

41. SSO Tariff Revisions

1. VEDO's Tariff will be revised as necessary to incorporate separate and distinct tariff sheets applicable to SSO Service and SSO Suppliers. (See proposed Tariff Sheets)
2. New SSO Rider tariff sheet — Replaces the GCR Rider.
3. All Rate Schedules listed under Section 8 and all other tariff sheets (as applicable) will reference "SSO Rider" rather than "GCR Rider".
4. Add SSO Supplier Rate Schedule and Terms and Conditions (similar to Pooling Service rate schedules and Terms and Conditions) setting forth the requirements of SSO Suppliers providing SSO Service.

42. Customer Education – SSO Phase

1. A Working Group approach will be used for developing the initial customer education communication.
2. The costs of Customer Education will be recovered in the Exit Transition Cost Rider.
3. SSO Suppliers' names will not appear on customers' bills; however the Customer Education Working Group will investigate including the names of the SSO and Choice Suppliers in educational material.
4. Education campaign preliminary suggestions are as follows. The Education Working Group will develop the actual proposals.

Education objectives Phase 1

1. To educate all customers about upcoming changes to the GCR and how these changes will make determining the commodity cost easier.
2. To demonstrate Vectren's support of customers' choice in selecting a marketer.

Timeline for phase 1

March to April 2008

Prepare pre-campaign survey; gather data; conduct research; and prepare creative for media relations, community relations and advertising campaigns.

May to March 2009

Execute media relations and community relations strategies.

March 2009

Distribute second survey after education campaign; collect data; continue media relations, community relations and advertising campaigns.

Budget estimate for phase 1 function education campaign: \$1 million

Breakdown of the services we'll be providing and details on the estimates for each category.

Research

Pre and post surveys focused on determining customers' awareness, recall and what it will take for them to switch.

Budget estimate: \$80,000

Media Relations

- Story pitches.
- Op/Eds regarding choice, GCR changes and customer opportunities.
- Ready-to-run articles regarding the movement toward Choice and why it's a good thing.
- A media tour throughout the market to sit down with utility reporters, explain the GCR changes, let people ask questions and provide examples.

Budget estimate: \$80,000

42. Customer Education – SSO Phase (Continued)

Community Relations

- Speakers' bureau: Visit community organizations throughout the service territory, make a Choice presentation and answer questions.
- Create Choice collateral explaining the changes to the Choice program and GCR with an updatable insert that we can put inside collateral material. This piece would be used as a leave-behind for community groups, media, etc.
- Put on a "Choice Fair" where the community can gather information about the program, find out about available gas marketers and take home collateral material. After collecting data from marketers, etc., attendees should be able to sit down with Vectren personnel to ask questions and figure out how their choices will affect their bills.

Estimate: \$40,000

Advertising

- Radio
- Outdoor
- Direct mail
- Television
- Newspaper

Estimate: \$800,000

TOTALS

Research	\$80,000
Media relations	\$80,000
Community relations	\$40,000
<u>Advertising</u>	<u>\$800,000</u>
TOTAL:	\$1 million

43. Choice Customer Eligibility Definition

Ohio Administrative Code

1. "Eligible customer" means a customer that is eligible to participate in a governmental aggregation in accordance with sections 4929.26 and 4929.27 of the Revised Code.
2. An eligible customer must meet all of the following:
 - a. Uses < 150,000 Ccf/year
 - b. Is not past due at time of enrollment
 - At the beginning of the VEDO Choice Program, past due parameters were set at 10 days or \$10 resulting in roughly 183,000 customers eligible for Choice
 - Updated past due parameters are now set at 35 days or \$100 resulting in roughly 223,000 customers eligible. An additional 40,000 customers will be eligible under the updated parameters.
 - c. Is not currently enrolled with a qualified Supplier

44. VEDO Design Peak Day Forecast

1. VEDO's Design Peak Day Forecast uses a linear regression based model. The forecast will be updated annually and will form the basis for any Capacity Contract changes the Company may make. The VEDO Working Group will be provided the revised forecast for their review and approval prior to any contract changes being effectuated.
2. The linear regression model variables include:

Variable	Coefficient (in Mcf)
PkDayHDD65	1520.12
PkDayHDD55	4616.40
Lag_HDD55	910.61
WinterWind	2093.23
DeliveriesTrend	0.017
AR(1)	0.918
MA(1)	-0.555

- a. HDD65 and HDD55 - captures the non-linear relationship between average temperature and demand.
- b. LagHDD55 - captures the impact of the previous day temperature
- c. WinterWind - captures the effect of the winter wind speed
- d. Deliveries Trend - captures the underlying sales growth trend without seasonal and weather variation.
- e. Auto Regressive Moving Average (ARMA) - corrects variation and improves accuracy

In this example, VEDO peak day has -14.5° F current day temperature, 11.5° F previous day temperature and 16.3 mph winter wind speed.

The equation is:

$$\text{CurrentDayTempImpact} + \text{LagDayTempImpact} + \text{CurrentDayWinterWindImpact} + \\ \text{DeliveriesTrend} + \text{ARMACorrection}$$

$$= 441,689.6 + 39,611.5 + 34,119.7 + 76,921.5 + \text{ARMACorrection} \\ = 592,342 + \text{ARMACorrection} \\ = 592,174 \text{ MCF}$$

3. 2007 VEDO Peak Design Day demand (in Mcf)

	2007-08 (in Mcf)
Total Peak Day Demand	592,174
Transportation Demand	111,379
Transportation Backup Demand	2,789
Choice Peak Day Demand	99,833
Sales Peak Day Demand	383,751

45. Choice Supplier Credit Requirements

1. Current Choice Suppliers must continue to meet their existing Choice Program creditworthiness requirements.
2. The requirements for SSO/SCO Supplier creditworthiness shall be in addition to those for existing Choice Program requirements, if a Supplier is active in both programs.
3. VEDO intends to net the credit exposures of individual Suppliers of SSO/SCO and Choice Programs.
4. The occurrence and continuation of an Event of Default on either of the SSO/SCO or Choice Programs shall be considered a cross default on the other Program and any other Pooling or Transport Service within VEDO's service area.
5. Choice Suppliers that receive VEDO-released pipeline and storage capacity will have the monthly pipeline and storage capacity charges that are due to the pipelines included in their credit exposure calculations.

46. Choice Balancing Cost Rider Suspension

1. The Balancing Cost Rider will be suspended due to the proposed change effective at the SSO Initiation Date requiring Choice Suppliers to take capacity release of and pay for an allocated share of TCO storage, which will be utilized to balance the system (see Sections 14 and 19).

47. Large Transporter Imbalance Provisions

1. Balancing Provisions for Large Transporters currently include a 15% daily imbalance tolerance, and a 5% monthly imbalance tolerance. (See attachment 47A for recent imbalance statistics)
2. It will be necessary to revise the Monthly Balancing to require cashout to zero percent, rather than five percent, to facilitate collective SSO/SCO and Choice Suppliers' system balancing responsibilities, as discussed in Sections 14.
3. Changes to the Large Transporter Balancing Provisions and billing practices would include:
 - a. Monthly zero percent tolerance
 - b. Revise Daily Cash-outs to include over-deliveries on Cold OFO days, and under-deliveries on Warm OFO days greater than the daily tolerance. However, if VEDO determines that helpful deliveries in excess of the daily tolerance are beneficial to balancing the system, VEDO may waive this requirement at their discretion. Helpful delivery waivers will be communicated with the posting of the OFO notice.
 - c. Gas cost portions of Cash-out charges and premiums assessed to Large Transporters/Pool Operators will be allocated to SSO/SCO and Choice Suppliers for providing balancing services.
 - d. Large Transporter cash-outs will be reviewed as part of the annual ETC Rider audit.
 - e. Creditworthiness assessments will be conducted on Large Transport Pool Operators and Large Transportation Customers to cover the exposure to SSO/SCO Suppliers for monthly balancing services.

48. SSO Phase Reporting

1. VEDO will provide monthly program statistics including the following: monthly SSO Rider Rate, number of SSO and Choice customers, SSO and Choice volumes by rate schedule, participation rates by rate schedule, number of SSO suppliers, market shares, and other information as desired by PUCO.
2. Also, VEDO will file quarterly reports that contain an assessment of supplier performance based on 1) target deliveries to volumes nominated, 2) target deliveries to volumes billed and, 3) comparable capacity required to comparable capacity demonstrated. Also, this report will identify and assess the impact of any supplier defaults, as well as storage use, system balancing performance, and comparable capacity requirements.

49. Standard Choice Offer (SCO) Phase

1. The SCO Phase is the next phase of the transition for VEDO's Merchant Exit and will be comprised of a minimum of two successive annual auctions. It will replace the VEDO SSO Phase.
2. SCO will not be a PUCO-regulated sales service to be provided by VEDO. It will be a Choice service offered on PUCO-regulated standard terms and conditions, including a standard price developed at each auction
3. Gas supply for VEDO's SCO service will be provided by SCO Suppliers who will be determined via an SCO Auction, as described in Section 52.
4. The loads of all former SSO/SCO Customers will be assigned to specific Choice Suppliers who will be their Standard Choice Offer Supplier, except for PIPP Customers, whose load will be served on a proportionate basis by the SCO Suppliers (similar to SSO service) but who will not be specifically assigned.
5. Under SCO Service:
 - a. VEDO will bill customers at the SCO Price per Ccf (See Section 53).
 - b. In addition, all Riders applicable to SSO customers will continue to apply to SCO customers
6. SCO Suppliers will be subject to all SSO Supplier requirements identified in VEDO's Merchant Exit Transition Program Outline, with the only exceptions being those specifically mentioned in the SCO sections of the Program Outline.
7. Choice customers may make an affirmative election to migrate to SCO Service or to select another Choice supplier upon termination of the Customer's existing agreement with that Customer's incumbent Choice supplier. In the event a Choice Customer's contract expires and the Customer makes no affirmative election of either SCO Service or a successor Choice Supplier, upon expiration of the Customer's contract that Choice Customer shall be assigned to a Choice Supplier in sequential order on that Choice Supplier's then standard monthly variable rate.
8. In the limited instances described above, a customer may be assigned to a Choice Supplier upon customer contract termination or customer contract expiration. In order to qualify as a potential default supplier in these instances, a Choice supplier must agree to accept assignment of the Customer and place that Customer on that Choice Supplier's then current and standard monthly variable price product without any cancellation or termination fee. Qualifying Choice Suppliers will be placed on a utility list and will be sequentially assigned customers.

50. SCO Timing

1. The SCO Phase Initiation Date will be April 1, 2009.
2. All SSO customers will become SCO customers on the SCO Initiation Date. Their loads will be assigned to their respective SCO Supplier randomly at the start of the SCO phase.
3. On the day prior to the SCO Initiation date, VEDO will issue its first SCO Supplier DDQ and SCO Suppliers will become responsible for providing SCO supply on the SCO Initiation Date.
4. On the SCO Initiation Date, the SSO Rider Rate will be replaced by the SCO Rider Rate for SCO customer billing purposes. All SCO customer usage billed on and after the SCO Initiation Date will be at the SCO Rider Rate.
5. The SCO Phase will extend over at least two annual auction periods.
6. If a settlement on moving to Phase 2, Full Choice, has not been approved by February 15, 2011, six weeks prior to the second annual SCO period expiration, then another SCO Auction (see section 52) will be held for a subsequent annual period, and so on thereafter.

51. Rate Schedules Subject to SCO Rider

1. The SCO Rider rate will apply to all customers receiving service under:
 - a. Rate 310 - Residential Standard Choice Offer Service
 - b. Rate 320 - General Standard Choice Offer Service
 - c. Rate 341 – Dual Fuel Standard Choice Offer Service
2. Approximately 25 Rate 330, Large General Sales Service, customers are too large to qualify for SCO or Choice Service. They are large enough, however, to be eligible for Rate 345, Large General Transportation Service. These larger Rate 330 customers must have converted to Rate 345 prior to the start of the SCO phase.

52. SCO Auction

1. VEDO will conduct at least two annual auctions under which only qualified CRNG Suppliers can compete for the ability to supply a share of VEDO's SCO load (a "customer load tranche").
2. The bids during each auction will be specified as an adjustment (the "retail price adjustment") to the NYMEX monthly settlement price as described in Section 53 and will be fixed for the entire one-year term of each SCO auction.
3. The retail price adjustment for auction purposes shall also be stated in \$ per Mcf. It will be converted to a price per Ccf for SCO Customer billing purposes.
4. VEDO's SCO load will consist of all SSO/SCO customer volumes in Mcf, plus a proportionate share of VEDO's PIPP load. For each auction, the SCO quantities will be divided as equally as possible and will consist of residential and commercial customers' loads. The approximate auction customer load tranche sizes including a proportionate share of PIPP Customer loads will be confirmed immediately prior to the auction.
5. A maximum of 2 customer load tranches (33% of total SCO quantities) will be awarded to any individual bidder.
6. A pro-rata share of VEDO's transportation and storage capacity will be released and to the SCO Suppliers who are the winning auction bidders for the customer load tranches (see Sections 12, 13, 14 and 15). The capacity released will be approximately 75% of the customer load tranches' peak loads.
7. VEDO will hire an independent auctioneer to conduct a descending clock auction.
8. A descending clock auction will be held in the same fashion as the SSO Auction (see section 9).

53. SCO Price

1. The SCO Price each month will be the NYMEX settlement price for such month converted to Mcf using an annual standard BTU plus the retail price adjustment determined by the SCO Auction. This will be a price per Mcf. It will be converted to a price per CCF for SCO Customer billing purposes.
2. The SCO Price will compensate SCO Suppliers for all of their costs of providing SCO Service for the entire term of the SCO Phase, including all pipeline demand and variable costs and gas commodity costs incurred by the SCO Supplier to meet the needs of the SCO customer load tranches and VEDO system balancing. It must also compensate for UAFC percentage retention (including company use) and variances thereof, actual BTU variations from estimated BTU values, Days Use vs. Heating Degree Day proration variations, hedging costs if any, and all other aspects of cost and risk relating to the provision of SCO Service as described in this Program Outline.
3. The SCO Price per CCF will be used for Apples-to-Apples posting purposes.

54. PIPP Customers – SCO Phase

1. For the SCO Phase, SCO Suppliers will serve a proportionate share of the PIPP Customers loads. The PIPP estimated loads will be included in the customer load tranche estimates provided to the SCO bidders prior to auction.
2. The PIPP customers' accounts will continue to be separately identified in the Company's billing system as PIPP customers; their accounts will not be specifically linked to SCO Suppliers.
3. Each day, the PIPP loads will be forecast and will be included in the SCO Suppliers' DDQ for the day.
4. PIPP Customers' billing will utilize the same SCO Price per CCF used for all other SCO Customers.

55. Customer Load Allocation to SCO Suppliers

1. Each SCO Supplier will be allocated actual customers' loads on a pro-rata basis based on the criteria listed below with the understanding that there will be small differences when customer loads are actually allocated. The criteria to be used is as follows:
 - a. Peak Day Usage
 - b. Geographical area
 - c. Credit Ranking (take in consideration non-Choice eligible)
 - d. Residential and Commercial
 - e. PIPP Load
2. Enrollments will be generated by VEDO to "enroll" customers with SCO Suppliers.
3. An SCO Supplier will then be linked to each customer's premise. Absent an affirmative election of a specific Choice Supplier, a new Customer moving to the premise at a future date will default to the SCO Supplier who was assigned the premise's load.
4. Loads for customers migrating to Choice will be removed from the SCO Supplier previously assigned to the customer's premise.
5. Absent an affirmative selection of a specific Choice Supplier, loads of new premises in the VEDO territory will be assigned to a SCO Supplier on a sequential basis.
6. SCO Suppliers will have to comply with VEDO's EDI file transaction requirements in order to receive customers' billed usage.

56. Migration to/from Choice – SCO Phase

1. Once the SCO Phase is initiated, upon affirmative election, Choice customers will be able to migrate to SCO Suppliers. Also, SCO Customers may migrate to Choice Suppliers. The process by which customers may migrate from a Choice Supplier to an SCO Supplier is described in Attachment 56A.
2. Any migration will impact the Suppliers' demand profiles, either increasing or decreasing them which in turn will cause a pipeline capacity short position and equally offsetting long position between the among the Suppliers.
3. As with SSO Phase, VEDO released capacity will follow migrating customers. The VEDO portion will represent approximately 75% of the migrating customer's load.
4. The amount and types of capacity that will follow the migrating customers will be as set out in Attachment 25A.
5. The VEDO-released capacity for all affected Suppliers will be adjusted effective the first day of each calendar month, to reflect the updated Capacity Release Percentages for Suppliers based on loads calculated just prior to the end of the month.
6. Although storage capacity will follow a customer, storage inventory will not follow a customer. The Supplier receiving the storage capacity must arrange any acquisition of gas inventory necessary under the circumstances.

57. SCO Supplier Qualifications

1. SCO Supplier Applicants must agree to execution of an SCO Supplier Agreement (see Section 59).
2. SCO Supplier Applicants must meet SCO Supplier Creditworthiness Requirements (see Section 64).
3. SCO Supplier must be CRNG certified and maintain that certification during the period in which the SCO Supplier serves in that capacity and be VEDO Approved. In order to obtain a VEDO approved status, Supplier must pass all testing criteria of EDI files as specified by VEDO.
4. SCO Suppliers must agree to comply with all Merchant Exit Transition rules and requirements as reflected in the Program Outline, SCO Supplier Agreement, VEDO Tariff, Exit Settlement and Commission Orders.
5. The purpose of these requirements – application, creditworthiness, supply – is to be sure that those who participate in the auction have both the wherewithal and the requisite intent to provide supply to VEDO under the SCO Phase.
6. To be eligible to participate in the auction as an SCO Supplier, a potential SCO Supplier would have to meet all deadlines for participation – i.e., timely submission of application and supporting documents is vital and no exceptions will be made.
7. Requirements include the following:
 - a. Application Requirements
 - i. Company Information, contacts, and alternate contacts
 - ii. Other relevant information
 - b. Credit Requirements
 - i. Creditworthiness requirements as detailed in Section 29
 - c. Supply Requirements
 - i. Estimated maximum number of tranches for which the applicant may be interested
 - ii. Applicant's preliminary capacity and supply plans to supply those tranches
 - iii. Other preliminary technical/supply requirements
 - d. Acknowledge Receipt of Auction Rules and Procedures and agree to be bound by those rules and procedures
 - e. Acknowledge Receipt of Customer Load Profile data
 - f. Attend and Participate in Pre-Application Meeting
 - g. Attend and Participate in Trial Auction, if held
 - h. Acknowledge Receipt from VEDO of the Pre-Qualification Notice (confidential to each potential SCO Supplier and the Auction Administrator) setting forth the maximum number of tranches for which the SCO Supplier is qualified to bid
 - i. Execute a Confidentiality Agreement with VEDO (to allow VEDO access to requested financial information for VEDO creditworthiness evaluation and to require non-disclosure of VEDO Pre-Qualification Notice, described above).

57. SCO Supplier Qualifications (cont')

8. Registered bidders may participate in the auction on a stand-alone basis or as the representative of a bidding agreement, joint venture or other arrangement among parties for the express purpose of bidding in the auction and supplying natural gas for any tranches awarded. Any bidders participating in such an arrangement must identify all of the other parties involved.
9. Registered bidders may not participate in more than one manner and may not be associated with another bidder in any supply arrangement intended to provide gas for the tranches being auctioned.
10. Registered bidders may not have a controlling interest or 10% or greater stake in another bidder or have any relationship that would provide financial or other incentives based on the outcome of bidding efforts.
11. In addition to certifying the preceding, registered bidders must also certify that they will maintain the confidentiality of their bidding strategy and not retain any bidding advisors or consultants providing similar service to another registered bidder.
12. Sanctions may be imposed on a registered bidder for failing to abide by any of the preceding certifications. Such sanctions may include, but are not limited to, the loss of:
 - a. any rights awarded in the auction
 - b. immediate termination of any other arrangements with VEDO
 - c. forfeiture of any monies owed to the bidder by VEDO
 - d. attorneys' fees and court costs incurred in any litigation that arises from failure to abide by the certifications, and
 - e. any other legal actions, including prosecution, as VEDO in its sole discretion deems appropriate under the circumstances.

58. SCO Tariff Revisions

1. VEDO's Tariff will be revised as necessary to incorporate separate and distinct tariff sheets applicable to SCO Service and SCO Suppliers. (See the proposed Tariff Sheets.)
2. SCO Rider replaces the SSO Rider.
3. All Rate Schedules listed under Section 51 and all other tariff sheets, as applicable, will reference "SCO Rider" rather than "SSO Rider".
4. Add SCO Supplier Rate Schedules and Terms and Conditions (similar to SCO Service rate schedule and Terms and Conditions) setting forth the requirements of SCO Suppliers providing SCO Service.

59. SCO Supplier Agreement

1. SCO Suppliers must execute an SCO Supplier Agreement containing the terms and conditions applicable to the relationship between VEDO and SCO Supplier. (See Proposed SCO Contract)

60. SCO Supplier Monthly Statement

1. SCO Supplier Monthly Statement will be rendered each month by the 25th day of the month, for the prior month's activity.
2. VEDO will pay the SCO Suppliers the total SCO dollars **billed** to their SCO customers for each revenue month as well as a pro-rata portion of the PIPP customers' SCO billings.
3. VEDO will pay the Choice Suppliers for the dollars **billed** to their Choice customers for the revenue month (as is currently done).
4. SCO Supplier Monthly Charges are identical to the Charges identified in Section 31 for SSO Suppliers.

61. SCO Customer Billing

1. SCO Customers will be billed at the monthly SCO Price per Ccf for all usage within a calendar month.
2. SCO Customers will continue to be billed on a cycle basis, with SCO Rider rate proration on a calendar month basis. The rate proration is currently done on a Days Use basis which assumes average daily usage over the billing period. The billing system will be revised to reflect Degree Day proration which prorates the heating load based on degree days.
3. Due to SCO Rider rate proration, the SCO Customers will not see on their bills a unit SCO rate equal to the calendar month NYMEX plus the Retail Price Adder, per Ccf. It will be a blended rate crossing two months.
4. SCO Customers will be subject to the Exit Transition Cost Rider.
5. SCO Suppliers names will appear on SCO customers' bills, in a manner determined by the Customer Education working group.
6. VEDO will purchase SCO Suppliers' receivables at no discount.

62. SCO Supplier Candidate Education

1. One or more educational meetings will be held prior to the SCO auctions with those Suppliers interested in bidding on VEDO SCO customer loads.
2. All relevant topics in VEDO's Merchant Exit Transition Program Outline will be discussed in detail.
3. The meeting(s) will be held prior to Supplier's submitting their SCO Supplier Application and undergoing creditworthiness evaluations.

63. POLR Responsibilities – SCO Phase

1. The SCO Phase POLR Responsibilities are identical to the SCO Phase responsibilities as described in Section 36.

64. SCO Supplier Creditworthiness Requirements

1. SCO Suppliers must meet the same VEDO Credit-worthiness requirements as specified for SSO Suppliers in Section 29.

65. SCO Supplier Failure to Perform

1. SCO Supplier Failure to Perform requirements are the same as described for SSO Suppliers in Section 30.

66. SSO Transition to SCO Phase

1. The initial SCO Auction will take place approximately 45 days prior to the end of the SSO phase.
2. An automated process will assign SCO Suppliers to SSO customers' premises on a random basis. Customer loads will be split as equally as possible based on geographical areas and credit ranking.
3. Customers will "enroll" with their assigned SCO Suppliers as of the first of the month upon implementation of the SCO phase.
4. Customer movement to/from Choice will take place on cycle.
5. Going forward, EDI files will be sent to SCO Suppliers notifying them of any new enrollments and drops.
6. PIPP customers will not be "enrolled" with a SCO Supplier, but the total PIPP load will be split proportionally among the SCO Suppliers.

67. Customer Education – SCO Phase

1. A Working Group approach will be used for developing the customer education communication.
2. The message to customers will necessarily depend on the Working Group's decisions on how and whether to communicate the FC Tipping Point and FC Customer Transition Methodology.
3. The costs of Customer Education will be recovered in the Exit Transition Cost Rider.
4. SCO Suppliers' names will appear on customers' bills.
5. Education campaign: preliminary suggestions:

Below are the recommendations for the Ohio Merchant Function education program:

Education objectives for phase 1.5

1. To educate all customers about upcoming auction of customers to select marketers.
2. To demonstrate Vectren's support of customers' choice in selecting a marketer and prepare customers for total exit.

Timeline for phase 1.5

March to April 2009

Prepare pre-campaign survey; gather data; conduct research; and prepare creative for media relations, community relations and advertising campaigns.

May to March 2010

Execute media relations and community relations strategies.

March 2010

Distribute second survey after education campaign; collect data; continue media relations, community relations and advertising campaigns.

Budget estimate for phase 1.5 function education campaign: \$1 million

The details for phase 1.5 will be flushed out by the education team (OCC, PUCO and VEDO) as we move forward. The budget will look similar to Phase 1.

TOTALS

Research	\$80,000
Media relations	\$80,000
Community relations	\$40,000
Advertising	\$800,000
TOTAL:	\$1 million

68. Reserved for Future Use

69. Reserved for Future Use

70. Disposition of Non-Compliance Charges – Non-Gas Portion

1. A number of charges are potentially assessed as part of the incentives to ensure that SSO/SCO, Choice, and Large Transporters/Pool Operators comply with their various Programs' rules. The non-gas portion of those charges include DDQ non-compliance charges, Imbalance Cashout premiums and discounts, and OFO non-compliance Charges. Those charges currently are credited to all Choice eligible customers via the PIPP Rider. As part of the Exit Settlement, Vectren will prospectively credit those charges proportionately to the Choice and SSO/SCO Suppliers who balance the VEDO system through holding VEDO-released TCO storage capacity

71. Reserved for Future Use

72. Reserved For Future Use

73. New Processes Tested by Phase

1. Phase 1 – SSO Phase:

- a. Market-based standard pricing
- b. Collective system balancing, including daily PDA Imbalance allocations and Monthly Volume Reconciliations
- c. VEDO coordinated collective POLR services
- d. Mandatory capacity release for SSO and Choice Suppliers
- e. Capacity follows migrating customer – monthly capacity release adjustments
- f. Customer Education – awareness of options

2. Phase 1.5 – SCO Phase:

- a. Phase 1 processes a through f, plus,
- b. DDQ forecasting for total system
- c. Customer Information System in near Full Choice mode – supplier for each premise, removal of movement to sales service for disconnects, EDI for all new and transferred customers, etc.

74. Customer Information System (CIS) Changes

1. The settling parties propose that the Commission approve both the SSO Phase and SCO Phase in its order regarding the settlement. The SSO Phase will require Customer Information System (CIS) changes that can be put in place in a relatively short time frame upon receipt of a Commission Order.
 - a. The SCO Phase, because of its movement of CIS to a nearly Full Choice mode will require more IT effort and therefore more lead time and expense to revise and test. The IT effort for both phases must therefore begin upon receipt of the Commission Order approving both phases.
2. The costs associated with implementing the CIS changes will be recovered via the Exit Transition Cost Rider.
 - a. High Level Systems Development Plan to support SSO Include:
 - i. Develop and implement new forecasting model to include daily/monthly storage injection/withdrawal requirements.
 - ii. Enhancements to VEDO's EBB in order to post daily/monthly storage minimum/maximum levels in addition to a storage information section which will include the Supplier's proportional share of daily storage balancing volumes and other pertinent information.
 1. Development of SSO and Choice Suppliers' statements to reflect the new tariff charges and balancing provisions.
 - iii. Ability to reverse back to GCR.
 - iv. Ability to handle defaulting Suppliers (POLR).
 - v. Changes to Large Gas Transportation daily/monthly tolerances, and OFO
 1. Cash-out provisions.
 - vi. Variance reporting requirements.
3. High Level Systems Development Plan to support SCO includes:
 - a. The CIS System will need to be modified to accommodate for non-HB9 requirements for SCO customer enrollments, and drops (e.g. rescission period, enrollment/drop letters, etc.).
 - b. Auto-assignment of SCO Supplier to new customers, and customers moving between premises.
 - c. Auto-assignment of a Choice Supplier on a sequential basis to Choice customers whose contracts are not being renewed, and have not made an affirmative election to SCO service or a specific Choice Supplier.
 - d. Changes to bill print to include SCO and Choice Supplier's names on customers' bills.
 - e. Modify system requirement of customer having to bill on VEDO sales service once before it will allow the customer to be eligible for Choice.
 - f. Modify system to default the customer back to the SCO Supplier assigned to that premise.
 - g. Unbundling of all customer services.
 - h. Ability to reverse back to GCR.
 - i. Ability to handle defaulting Suppliers (POLR).
 - j. Modification to current EDI file transactions to auto-create new enrollments transactions for SCO customer transfers, and to create auto-drop transactions for SCO customers shut-offs.

k. Various reporting requirements.

75. Reversion to GCR Service

1. The settling parties recognize that the Commission, as it did in the DEO Phase 1 proceeding, will retain the right to order VEDO to revert to GCR Sales Service at any time during the SSO or SCO Phase. VEDO also retains the right to petition the Commission to revert to GCR service.
2. SSO/SCO Supplier Agreements must reflect the possibility of reversion to GCR service as a risk taken on by the Suppliers.
3. Processes for unwinding SSO/SCO/Choice Supplier TCO storage positions would need to be contemplated as well in the event of reversion.
4. As described in the Customer Information System Change Section (section 74), various CIS processes would need to be reverted as well should the Commission Order such a reversion. **The costs of reversion efforts would be considered as costs recoverable through the Exit Transition Cost Rider, absent a determination to the contrary by the PUCO.**

76. Audits – Post GCR

1. The need for a GCR M/P audit and the GCR Financial Audit are eliminated prospectively from the date of the SSO Implementation.
2. A new annual audit would be implemented to review all costs and revenues reflected for recovery/pass back in the ETC Rider.
3. The Uncollectible Expense Rider, formerly reviewed as part of the annual GCR Financial audit, will be audited on the same schedule as the new annual ETC Rider audit.

77. Portfolio Administration/VEDO Hedging

1. Depending on the initiation of Phase 1, VEDO may continue to be responsible for providing GCR sales service after March 31, 2008 and perhaps for the winter of 2008-2009.
2. In the fall of 2007 VEDO issued an RFP for Portfolio Administration Services to begin November 1, 2007. The termination date was set at March 31, 2008. , but that agreement could be extended to a later month-end date depending on the PUCO-approved initiation date of Phase 1.
3. VEDO has hedged winter supply, November 2007 through March 2008, through its Advance Purchases Program, using its standard practice of hedging approximately 75% of its expected winter deliveries. But it has not hedged beyond March 31, 2008, in anticipation of the initiation of SSO Service.
4. VEDO will not restart hedging through advance purchases beyond March 31, 2008, due to the expected implementation of SSO Service by July 1, 2008. If, however, the SSO initiation date is postponed such that VEDO will be supplying GCR service in the winter of 2008-2009, the decision not to make advance purchases will be reevaluated.

Attachment Reference Listing

- 3A - Phase Comparison
- 9A - Tranche Sizes
- 14A – Balancing Cost Rider tariff sheet
- 14B – UAFG Percentage tariff sheet
- 14C – Historical Balancing Volumes
- 14D – TCO – LDC System Balancing Upon Existing Merchant Function Notice
- 15A – VEDO Capacity Contracts and Costs
- 17A – TCO Storage Tolerances Based on HDD
- 17B – Monthly TCO Storage Volume Targets
- 20A – DDQ Screen
- 21A – Forecast Linear Regression Model example
- 21B – Article on ANNS
- 21C – Daily Demand Forecast
- 23A – Current City-gate Allocation Table
- 23B – Proposed SSO City-gate Allocation Table
- 24A – Standard BTU
- 25A – Reassignment of Capacity Example
- 29A – Collateral Requirements
- 31A – Receivables Payment Timeline Example
- 32A - Usage Volume Reconciliation Calculation Example
- 32B – SSO/SCO Billing Timeline Example
- 40A – Implementation Costs estimate
- 47A – Large Gas Transportation Balancing Statistics
- 56A – Affirmative Election Procedure
- 58A – Historical PIPP Rider credits/charges From Large GT premium charges

Attachment 3A

No.	Item	Current		Phase 1.5 -- SSO		Phase 1.5 -- SCO		Phase 2 -- FC	
		GCR Sales Service	Standard Sales Offer Service	Standard Choice Offer Service	SCO Suppliers	Specific Customer Pools (16th of sales initially)	Tariff	NYMEX plus Auction Adder	Full Choice
1	Initiation Date	Current	1-Jul-08	1-Apr-09					Determined in Phase 2 proceeding
2	Service Provider	VEDO, w/Portfolio Administrator	VEDO, w/SSO Suppliers	SCO Suppliers					Choice Suppliers
3	Customers Served	All Sales Customers	Load Tranche (16 of sales)	Specific Customer Pools (16th of sales initially)					All Choice Customers
4	Customer "Agreement"	Tariff							Contract
5	Pricing	GCR							Negotiated
6	Gas Supply Billing	Company	Company	Company	Company	Company	NYMEX plus Auction Adder	Company or Choice Supplier -- Supplier name on commodity bill	
7	Auction Frequency	N/A		1					None
8	Eligible Auction Bidders	N/A		Any creditworthy Supplier	Any creditworthy Choice Supplier	Any creditworthy Choice Supplier			
9	Capacity Release to Suppliers	N/A		Mandatory (about 75% of load)	Mandatory (about 75% of load)	Mandatory (about 75% of load)			Mandatory (about 75% of load)
10	Daily Forecasting	Full Sales Load		DDQ (Full Sales Load * 1/16)	DDQ (Specific Customer Pools)	DDQ (Choice Pools)			DDQ (Choice Pools)
11	System Balancing (CO Storage)	Company		SSO/Choice Suppliers	SSO/Choice Suppliers	SSO/Choice Suppliers			Choice Suppliers
12	Changes to Choice Program	None		Implement Mandatory Capacity Release (about 75% of Load), Increase Various Penalties to Match SSO Penalties	Implement Alternative Election requirements	Implement Alternative Election requirements			No Further Changes
13	Transportation Program	None		Reduce Monthly Cashout to 0% (from 5%)	No Further Changes	No Further Changes			No Further Changes
14	IT Requirements	None		\$1 million	\$ 2.5 million	\$ 2.5 million			Not Yet Known
15	Audits/Filings	MIP, Financial, LTFR		Annual Exit Tracker Review	Annual Exit Tracker Review	Annual Exit Tracker Review			Annual Exit Tracker Review

Attachment 9A

Attachment 14A

VECTREN ENERGY DELIVERY OF OHIO, INC.
Tariff for Gas Service
P.U.C.O. No. 2

Third Revised Sheet No. 36
Cancels Second Sheet No. 36
Page 1 of 1

BALANCING COST RIDER

APPLICABILITY

The Balancing Cost Rider shall be applicable to Suppliers served under Rate 385 – Pooling Service (Residential and General).

DESCRIPTION

Each month, Supplier shall be assessed the Balancing Cost Rider Rate for all billed Ccf of its Pool Customers for the associated cycle month.

This Rider recovers the costs incurred by Company for Interstate pipeline transportation and storage services and any other services needed to provide operational balancing to Suppliers' Pools.

Company shall adjust this Rider annually effective November 1st of each year to reflect changes in the costs to be recovered.

All Balancing Cost Rider revenues recovered shall be credited to the GCR gas costs.

BALANCING COST RIDER RATE

The Balancing Cost Rider Rate for Pool Customer's billed Ccf on and after November 1, 2007 is \$00327 per Ccf.

Attachment 14B

VECTREN ENERGY DELIVERY OF OHIO, INC.
Tariff for Gas Services
P.U.C.O. No. 2

Original Sheet No. 54
Page 1 of 1

UNACCOUNTED FOR GAS PERCENTAGE

APPLICABILITY

The Unaccounted for Gas Percentage shall be applicable to Choice Suppliers, Pool Operations, and to all non-Pooling Transportation Customers served under Rate 345.

DESCRIPTION

A percentage of the quantities received by Company from applicable parties at a point of receipt on the Company's distribution system shall be retained by Company to compensate for unaccounted for gas.

The Unaccounted for Gas Percentage stated below shall be adjusted periodically by Company through updating of this Sheet No. 54 after approval by the Commission, to reflect any changes in the system unaccounted for percentage.

UNACCOUNTED FOR GAS PERCENTAGE

The Unaccounted for Gas Percentage is 1.8%.

Filed pursuant to the Finding and Order dated April 13, 2005 in Case No. 04-671-GA-AIR of The Public Utilities Commission of Ohio.
Issued April 13, 2005 Issued by Jerrold L. Ulrey, Vice-President Effective April 13, 2005

Attachment 14C

VIEDO 2004-2006 Model vs. Actual Miss Absolute Value of Model Error for All Days												
Rank	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	107,599	61,466	57,236	109,606	50,360	6,326	13,584	6,401	13,513	47,382	59,183	95,020
2	89,279	56,948	40,512	55,914	35,104	6,205	12,190	5,794	9,671	37,315	50,342	69,291
3	82,269	49,572	38,730	55,658	33,712	6,118	10,993	5,155	9,020	34,009	48,358	51,917
4	77,563	48,751	38,599	53,624	26,399	5,990	9,730	5,109	8,517	34,430	46,697	50,771
5	70,113	47,701	35,715	43,475	26,146	5,821	9,174	4,980	8,466	32,050	46,341	49,052
6	67,416	43,851	35,421	43,168	26,062	5,533	9,635	4,928	8,404	31,987	46,187	47,203
7	64,960	43,302	33,452	33,957	22,496	5,451	8,791	4,475	7,589	28,053	45,248	47,415
8	61,281	42,721	32,875	33,181	20,268	5,124	7,216	4,013	7,210	27,796	42,153	43,716
9	53,138	42,571	32,696	32,862	19,451	4,917	6,846	3,752	6,565	27,300	39,543	42,626
10	45,090	39,389	32,035	31,874	19,232	4,528	6,553	3,731	6,393	26,035	38,525	43,108
11	44,143	37,171	31,353	30,032	19,194	4,433	6,432	3,476	6,270	25,816	36,690	42,800
12	43,473	37,076	29,489	29,129	18,323	4,429	6,400	3,413	6,103	23,532	36,163	42,308
13	43,404	35,405	27,987	28,877	16,206	4,428	1,937	3,388	6,085	22,979	35,796	38,132
14	42,697	35,063	27,617	28,818	15,998	4,409	5,779	3,290	5,606	22,156	33,988	37,754
15	42,042	31,223	27,588	24,529	14,549	4,384	5,626	3,248	5,547	21,772	33,725	39,437
16	40,460	30,863	27,243	23,609	12,424	4,368	5,606	3,193	5,283	20,741	33,147	37,923
17	40,401	29,114	27,513	23,577	12,278	4,355	5,308	3,125	5,129	18,330	32,998	36,988
18	36,795	28,898	26,112	23,548	11,479	4,263	5,162	3,091	5,122	17,361	32,892	36,768
19	35,543	28,503	24,176	23,286	10,966	3,869	5,159	3,076	5,094	15,874	31,282	36,306
20	34,739	28,476	24,081	21,082	10,910	3,508	4,989	2,919	4,939	14,988	29,486	36,463
21	34,115	28,384	24,070	20,393	10,746	3,274	4,932	2,915	4,917	14,783	29,190	36,363
22	33,005	28,362	23,887	19,150	10,685	3,268	4,593	2,858	4,531	14,061	28,187	35,149
23	31,457	25,325	23,144	17,524	9,240	3,210	4,503	2,836	3,739	13,964	27,971	24,962

Attachment 14C Cont'd.

24	30,844	23,678	22,766	17,100	9,036	3,191	4,502	2,493	3,723	13,962	27,574	24,540
25	20,953	23,645	22,251	16,244	8,782	3,097	4,474	2,486	3,719	13,534	25,846	23,207
26	28,449	22,672	21,623	14,665	8,697	3,062	4,256	2,463	3,679	13,491	25,644	22,794
27	28,430	22,337	21,233	13,040	8,337	2,820	4,246	2,453	3,531	13,304	24,140	22,790
28	27,897	22,052	20,982	12,261	8,545	2,738	4,206	2,360	3,383	13,180	23,721	22,452
29	27,059	21,628	20,912	12,181	8,226	2,535	4,000	2,256	3,313	12,469	23,000	22,235
30	26,160	21,181	19,867	11,189	7,786	2,531	3,961	2,211	3,163	12,044	23,307	22,080
31	25,272	20,158	18,978	10,909	7,307	2,509	3,939	2,210	3,005	11,766	22,110	21,633
32	24,124	18,205	18,630	10,182	7,056	2,492	3,741	2,199	2,924	11,762	20,985	20,797
33	24,703	17,019	18,141	10,085	6,921	2,481	3,663	2,189	2,884	11,531	20,622	20,316
34	24,579	17,014	17,111	9,883	6,769	2,398	3,660	2,181	2,839	10,946	20,233	20,176
35	23,817	16,856	16,513	9,838	6,642	2,346	3,633	2,091	2,833	10,934	20,228	19,517
36	22,677	16,843	16,402	9,231	6,597	2,330	3,587	2,007	2,710	10,921	20,112	19,045
37	22,473	16,752	16,192	8,634	6,458	2,220	3,382	1,953	2,708	10,610	18,303	18,049
38	21,906	16,085	16,108	8,615	6,287	2,186	3,085	1,940	2,664	10,425	18,169	17,635
39	21,641	15,396	15,707	8,287	6,267	2,120	3,040	1,861	2,488	10,305	18,006	17,184
40	20,902	15,262	15,684	8,116	6,133	2,112	2,914	1,859	2,404	10,183	17,888	15,520
41	19,976	15,005	15,609	8,042	5,839	2,092	2,914	1,833	2,382	10,061	16,775	14,392
42	19,602	14,663	15,366	8,010	5,694	2,017	2,911	1,838	2,328	9,857	15,825	14,525
43	19,556	14,539	14,924	7,615	5,642	1,876	2,879	1,807	2,313	9,840	15,276	14,260
44	18,937	14,410	14,833	7,445	5,448	1,828	2,866	1,806	2,257	9,367	15,210	14,024
45	18,831	13,594	14,798	6,941	5,287	1,653	2,849	1,782	2,233	9,377	14,231	13,676
46	18,376	13,520	13,561	6,780	5,165	1,618	2,797	1,730	2,118	9,072	13,935	13,577
47	17,832	13,186	12,445	6,617	5,086	1,580	2,729	1,727	2,174	8,989	13,830	13,298
48	17,686	12,980	12,345	6,327	4,764	1,506	2,681	1,601	2,174	8,986	13,637	12,985
49	16,296	12,717	11,996	6,440	4,618	1,502	2,471	1,563	2,141	8,194	13,056	12,460
50	16,213	11,719	11,895	5,948	4,452	1,373	2,450	1,523	2,129	8,082	12,557	12,245
51	16,003	11,691	11,728	5,829	4,422	1,351	2,391	1,471	2,087	7,671	12,032	12,154
52	15,527	11,077	11,515	5,367	4,400	1,333	2,334	1,458	2,077	7,483	11,931	11,879
53	15,249	10,172	11,253	5,311	4,343	1,318	2,266	1,448	2,044	7,310	11,390	11,595
54	14,015	10,044	11,104	5,311	3,991	1,244	2,258	1,423	1,968	7,147	11,410	10,815
55	13,339	9,713	10,495	5,307	3,841	1,206	2,079	1,398	1,872	6,828	11,252	10,707
56	13,310	9,373	10,015	4,949	3,711	1,204	2,039	1,341	1,864	6,721	11,087	10,686
57	13,158	9,220	9,747	4,911	3,625	1,175	2,003	1,334	1,832	6,600	10,712	10,806
58	12,481	9,213	9,190	4,621	3,492	1,161	1,957	1,223	1,802	6,534	10,213	10,563
59	12,402	8,923	9,124	4,234	3,216	1,121	1,821	1,222	1,730	6,501	9,872	10,197
60	12,149	8,871	9,014	4,009	2,879	1,098	1,651	1,120	1,544	6,437	9,808	9,969

Attachment 14C Cont'd.

61	12,108	8,622	8,874	4,001	2,878	1,039	1,647	1,082	1,507	6,311	9,754	9,385
62	12,077	8,133	8,627	3,938	2,788	1,010	1,629	1,021	1,489	6,072	8,722	9,107
63	11,768	7,732	8,132	3,556	2,418	981	1,554	1,018	1,420	5,966	7,966	8,566
64	11,375	7,638	7,964	3,389	2,369	901	1,537	957	1,412	5,669	7,713	8,453
65	11,058	7,586	7,657	3,207	2,358	898	1,509	910	1,409	5,660	7,487	8,181
66	10,208	6,955	7,551	3,173	2,117	888	1,480	904	1,408	5,646	7,403	7,297
67	9,888	6,777	7,447	3,157	1,910	837	1,338	876	1,222	5,498	7,238	7,265
68	9,887	5,899	6,838	3,012	1,907	833	1,244	872	1,167	5,191	6,288	7,059
69	9,611	4,877	6,661	2,686	1,875	822	1,206	839	1,096	5,029	6,286	6,931
70	9,316	4,825	6,382	2,647	1,719	696	1,147	810	1,050	4,916	5,623	6,689
71	8,906	4,760	5,736	2,430	1,662	684	1,130	693	980	4,906	5,614	6,201
72	8,382	4,654	5,467	1,982	1,627	674	1,124	637	938	4,389	5,278	6,175
73	6,895	4,225	5,325	1,922	1,475	672	1,116	602	914	4,460	4,945	5,978
74	6,727	4,216	5,034	1,893	1,399	625	1,039	569	878	4,131	4,801	5,916
75	6,444	3,692	4,639	1,861	1,303	614	1,023	537	839	4,009	4,793	5,721
76	5,478	3,674	4,905	1,858	1,228	597	826	535	780	3,991	4,622	5,424
77	5,448	2,981	4,273	1,737	1,149	565	825	524	739	3,935	4,154	5,192
78	4,267	2,937	3,443	1,523	1,097	515	730	494	687	3,772	3,850	5,131
79	3,522	2,700	3,290	1,513	1,017	463	693	481	658	3,467	3,828	5,043
80	3,465	1,609	3,072	1,316	962	407	671	473	465	3,309	3,462	5,024
81	3,344	1,538	3,002	1,019	874	391	653	453	406	3,028	3,436	4,606
82	2,640	705	2,665	983	872	328	652	437	374	2,661	2,976	4,269
83	2,455	639	2,523	980	793	302	595	409	331	2,421	2,546	4,170
84	2,096	95	2,235	891	771	296	519	391	314	2,264	2,431	3,861
85	1,835	6	1,864	638	689	292	489	319	222	1,721	1,739	3,152
86	1,294	1,807	535	613	258	419	279	147	147	1,459	1,176	507
87	1,205	1,717	345	604	169	382	264	55	55	1,459	1,030	1,854
88	1,488	1,488	322	549	104	374	183	38	1,353	979	1,823	
89	1,161	1,173	312	419	24	362	162	34	34	1,176	507	1,695
90	479	1,168	131	236	5	246	156	5	5	1,046	128	1,640
91	390	646	207			228	150			449		1,618
92	374	538	47			100	130			226		1,425
93	49	181			23	93	64			103		721

Attachment 14C Cont'd.

VEDO 2004-2006 Model vs. Actual Miss
Absolute Value of Model Error Excluding Sunday, Monday and Holidays

Rank	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	77,563	61,466	57,236	55,914	26,062	6,326	9,730	6,401	13,513	37,315	59,183	50,771
2	70,113	49,572	35,421	53,624	22,496	6,205	9,174	5,794	9,671	34,440	46,697	49,052
3	61,281	47,701	32,875	43,475	19,451	5,990	6,432	4,980	9,020	32,050	46,187	43,716
4	45,090	43,851	32,035	43,169	19,194	5,821	6,400	4,475	8,517	28,053	45,248	43,636
5	44,143	42,721	27,543	33,957	18,325	5,533	5,937	3,752	8,466	27,796	42,153	42,860
6	43,475	42,571	27,513	33,181	16,206	5,451	5,779	3,731	8,404	27,309	39,543	42,308
7	43,404	37,171	26,112	32,862	15,998	4,528	5,626	3,413	7,589	26,035	36,690	38,132
8	42,697	37,076	24,176	29,129	14,549	4,433	5,606	3,388	7,210	25,816	36,163	37,754
9	42,042	35,405	24,081	28,877	12,424	4,429	5,162	3,193	6,393	23,552	35,796	29,437
10	40,460	31,223	24,070	28,818	12,278	4,428	4,989	3,091	6,270	22,979	33,725	26,768
11	40,401	29,114	23,887	24,529	11,479	4,409	4,593	3,076	6,085	21,772	33,147	26,506
12	35,543	28,898	23,144	23,609	10,966	4,368	4,502	2,919	5,606	20,741	29,486	26,465
13	30,844	28,503	22,766	23,577	10,746	4,355	4,474	2,915	5,547	18,310	28,187	24,540
14	28,449	28,476	21,623	23,548	9,240	4,263	4,246	2,493	5,285	17,361	27,971	22,790
15	27,059	28,362	21,253	23,286	9,036	3,508	4,206	2,486	5,129	14,061	27,574	22,452
16	25,134	25,325	20,982	20,393	8,697	3,268	4,000	2,463	5,122	13,962	25,846	22,235
17	24,703	23,678	20,912	19,150	8,545	3,210	3,961	2,453	5,094	13,491	25,644	21,633
18	23,817	23,645	18,978	17,524	8,226	3,097	3,939	2,360	4,939	12,469	23,721	20,797
19	22,677	22,052	18,630	17,100	7,786	2,820	3,741	2,210	4,917	12,044	22,507	20,316
20	21,906	21,181	18,141	16,244	7,507	2,535	3,633	2,199	4,531	11,766	20,985	20,176
21	21,641	18,205	16,513	14,665	7,056	2,531	3,382	2,189	3,739	11,762	20,622	19,045
22	20,992	16,752	16,402	13,040	6,642	2,509	3,085	2,091	3,723	11,531	20,253	18,049
23	19,976	16,085	16,108	12,181	6,597	2,492	3,040	2,007	3,719	10,944	20,228	17,184
24	19,602	15,396	15,707	10,182	6,458	2,481	2,914	1,861	3,531	10,921	20,112	15,520
25	19,556	14,663	15,684	10,085	6,287	2,398	2,914	1,838	3,313	10,610	18,503	14,525
26	18,937	14,539	15,366	9,858	6,267	2,346	2,911	1,807	3,163	10,425	17,888	14,260
27	18,851	14,410	14,924	9,231	6,133	2,330	2,879	1,806	3,005	10,061	15,825	14,024
28	18,376	13,594	14,833	8,634	5,859	2,186	2,849	1,782	2,924	9,857	15,276	13,676
29	17,686	13,520	14,798	8,615	5,694	2,120	2,797	1,730	2,884	9,840	13,935	13,577
30	16,213	13,186	13,561	8,287	5,642	2,112	2,450	1,727	2,839	9,567	13,830	13,298
31	16,003	12,980	12,345	8,116	5,448	2,092	2,334	1,651	2,833	9,377	13,657	12,985
32	15,527	12,717	11,996	8,042	5,287	2,017	2,266	1,471	2,708	8,989	13,056	12,460
33	15,249	11,719	11,895	8,010	5,165	1,838	2,039	1,425	2,664	8,986	11,931	12,245
34	14,015	11,691	11,253	7,445	4,618	1,618	2,003	1,398	2,404	8,082	11,590	11,879
35	13,359	11,077	11,104	6,780	4,452	1,580	1,957	1,341	2,382	7,671	11,252	11,595

COLUMBIA GAS TRANSMISSION CORPORATION

NOTICE TO ALL INTERESTED PARTIES
AUGUST 31, 2007

Notice ID: 11643

5 - NO RESPONSE REQUIRED

**LDC System Balancing
Upon Exiting Merchant Function**

OBJECTIVE:

When a local distribution company (LDC) desires to exit its merchant function the LDC may release as much storage capacity on Columbia Gas Transmission Corporation (TCO) as possible to third party suppliers, while maintaining the ability to balance its system using that storage capacity.

POSSIBLE APPROACH:

1. The LDC can temporarily release all or a portion of its TCO storage capacity to third party suppliers effective for a specified period of time and sell the existing storage inventory to those suppliers at that time. The storage capacity can be released in accordance with the capacity release provisions set forth in Section 14 of the General Terms and Conditions (GTC) of TCO's FERC Gas Tariff (Tariff). The inventory can then be transferred through a separate transaction as described in No. 2e below.
2. The LDC can impose conditions on the release of the storage capacity, such as:
 - a. The third party suppliers must agree to allow their storage capacity (in

- a. The third party suppliers must agree to allow their storage capacity (in

the aggregate) to be used to balance the LDC's system. The LDC's existing FSS and SST capacity must be released together to the third party suppliers. Predetermined Allocations (PDAs) can be set up proportional to the released

capacity to manage daily balancing/ imbalances. Under this scenario, the TCO storage no-notice feature is retained within all third party suppliers' allocated storage. In addition, the third party suppliers may perform a nominated storage true-up through TCO's Electronic Bulletin Board (EBB) within one hour after the posting of deliveries for the final hour of the day.

The LDC may also perform a true-up upon recall as well.

b. The suppliers must agree to follow LDC-established Min/Max boundaries for daily and monthly storage injection/withdrawal, to ensure sufficient storage inventory/capacity to balance the system each day. The third party suppliers will be accountable for their storage injection/withdrawal limits as determined by their SCQ per Columbia's tariff. The LDC may establish its own limits/boundaries with the suppliers through other means not imposed by TCO.

c. The TCO storage capacity may not be re-released. The LDC may prevent the re-release of TCO storage capacity by third party suppliers through the capacity release terms and conditions when the release is made.

d. The LDC must be provided access to information about the third party suppliers' storage balances at all times. The LDC can be designated as agent for each third party supplier in order to access their storage information and administer their storage account if needed provided the third party is agreeable.

e. The third party suppliers must agree to allow the LDC to shift some FSS capacity among the suppliers at the start of each month, due to Customer migrations. Capacity follows the Customer. Using TCO's EBB, the LDC can shift

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order to manage customer migrations through a recall and re-release. No fee

Inventory transfers (FSS to FSS) among suppliers are subject to TCO approval but are normally granted for similarly situated customers barring extraordinary circumstances.

3. On a daily basis, the LDC's total system imbalances will be managed as per

the established PDA in conjunction with the no-notice service as a no-notice

4. The LDC will be able to establish PDAs and update them monthly as well

as daily which will assign a percentage of each day's LDC's system imbalance as a no-notice TCO storage injection or withdrawal to each TCO capacity holder (based on their proportion of total TCO storage).

5. TCO allows no-notice true-up nominations but will allocate imbalances per the PDA.

6. After month-end, the LDC will calculate actual imbalance responsibility among its third party suppliers and transporters who will then do in-field transfers among themselves to re-shuffle the PDA-allocated imbalance

The LDC understands that in-field transfers can be completed at no cost but subject to TCO approval as described in 2e. The LDC also understands that in-field transfers can be completed at no cost but are subject to TCO approval as described in 2e.

7. TCO will assess overruns and/or penalties to the supplier(s) that caused

8. The LDC understands that suppliers will have injection/withdrawal capability year round, just like the LDC based on their respective Storage Contract Quantities (SCQs) per the TCO tariff.

9. The Meter Operator's risk under this approach would be limited to any operational flow orders relating to the LDC's delivery points and/or Total Firm Entitlement (TFE) penalties if the LDC holds firm contracts to those delivery points.

10. The "FSS true-up" may be found in the SST Rate Schedule of TCO's Tariff on Sheet No. 116.

11. Nominations from storage will only be required for deliveries to systems other than LDC's system (off system). Off system nominations will not retain the no-notice feature. The total Supplier SCQ based withdrawal limit is reduced by the off system nomination amount. Injections or withdrawals to the LDC's system do not require a nomination.

12. The LDC and third party suppliers understand that all shippers must warrant that they have title to the gas under their respective contracts in accordance with GTC Section 23 of TCO's Tariff.

13. The LDC and third party suppliers understand that the Rate Schedules and GTC of TCO's Tariff govern all transactions.

VEDO MONTHLY FIRM TRANSPORTATION DEMAND CHARGES 11/2007 - 10/2008

Attachment 15A cont'd

Attachment 15A cont'd

VEDO MONTHLY STORAGE DEMAND CHARGES 11/2007 - 10/2008

	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Sep-08	Oct-08	Annual Charges
Columbia Gas (TCO)															
SST Demand Charge	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,637,600
Summer MDQ 100,000	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$1,121,884	\$16,903,224
Winter MDQ 200,000	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$5,609,322
FSS Deliverability Charge															
MDQ 200,000	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$281,255	\$3,563,276
FSS Capacity Charge															
SCQ 7,648,000	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$214,612	\$2,575,339
Inj/With Commodity Charge	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053	\$0.053
Storage Injection %	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%
Subtotal TCO Demand Charges	\$1,627,731	\$16,385,537													
 Panhandle Eastern: (PEPL)															
EFT Demand Charge	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83,441
Summer MDQ 21,450	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$173,447	\$83,441
Winter MDQ 46,080															\$83,441
FSS Deliverability Charge															
MDQ 46,704	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$134,280	\$1,642,374
FSS Capacity Charge															
SCQ 360,280	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$139,228	\$1,703,988
Inj/With Commodity Charge	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385	\$0.0385
Storage Injection %	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%
Storage Withdrawal %	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%	1.17%
Subtotal PEPL Demand Charge	\$446,955	\$4,797,682													
Total Storage Demand Charges	\$2,074,388	\$21,183,219													

Note: Includes IG Capacity Releases for the period November 2007 - March 2008.

ATTACHMENT 17B

VEDO MONTHLY TCO STORAGE REQUIREMENTS

Month	Daily Minimum Required % of SCQ in TCO Storage	Maximum Required % of SCQ in TCO Storage	TCO Tariff
April	10%		TCO Tariff
May	10%		TCO Tariff
June	10%		TCO Tariff
July	10%		TCO Tariff
August	10%		TCO Tariff
September	10%		TCO Tariff
October	10%		TCO Tariff
November	30%		TCO Tariff
December	30%		TCO Tariff
January	30%		TCO Tariff
February 1 - 15	30%		TCO Tariff
February 16 - 28	10%		TCO Tariff
March	10%		TCO Tariff

Note: VEDO will require all the released capacity holders of the VEDO TCO FSS storage service to maintain a minimum balance of 30% of the released TCO SCQ capacity in inventory until February 15th of each year. This is needed in order for VEDO to be assured that the first TCO storage ratchet is not reached prior to February 15th each year.

Attachment ZUA

Box 1 DocID: ABC Chassis Pool Description: ABC Chassis Pool SubPile: ABC Corp. Effective Date: January 07 Last Updated: January 16, 2007 General Gas Transportation Accounts Average GRU Factor:	Box 2 Directed Delivery Quantity (DDQ) and Related Information Box 2 Pro-Qual Expected Demand (using forecasting model) DDQ (DDQ): Box 2 Pro-Qual/Delivery Point Min. Max. COLUMBIA GAS 16,152 73,476 Columbia Gas 12,193 10,463 Delernburg 2,913 1,116 Den Kern 0 0 Probes Supplied by VEDO Quarterly Reconciliations Daily Reconciliation Daily Reconciliation Total Adjustments Box 2 Box 3 Box 3 Box 3 Box 4 Box 4 Box 4
Box 1 DocID: ABC Chassis Pool Description: ABC Chassis Pool SubPile: ABC Corp. Effective Date: January 07 Last Updated: January 16, 2007 Box 1 Box 2 Box 3 Box 4	
Box 1 Box 2 Box 3 Box 4 Box 5	

Attachment 21A

SSO Peak Supply and Cold Day Model

Date	Enter the date eg. 10/4/03	
Residential Customers	Enter your residential customer count	
Small Commercial Customers	Enter your small commercial customer count	
Large Commercial Customers	Enter your large commercial customer count	
HDD	Enter your HDD	
Holiday	Enter 1 If NYEve, NYDay, XmasDay, XmasEve, July4, LaborDay, Thanksgiving, FriAfterThanksgiving, MLK, PresDay, ColumbusDay, VeteransDay, MemorialDay and 0 if not	
Weekend/Holiday	Automatically Updated	
DDQ	147.657 Dth	

Section A. Residential Calculation			Section B. Small Commercial Calculation			Section C. Large Commercial/Industry Calculation		
Residential	Coefficient	Value	Small Commercial	Coefficient	Value	Large Commercial	Coefficient	Value
BaseLoad	0.0521	12724	BaseLoad	0.4338	651	BaseLoad	2.0270	1014
JanHDD65	0.0126	115792	Weekend-Holiday	-0.1979	0	Weekend-Holiday	-0.6130	0
FebHDD65	0.0124	0	JanHDD65	0.0388	2620	JanHDD65	0.1880	4185
MarHDD65	0.0130	0	FebHDD65	0.0385	0	FebHDD65	0.1770	0
AprHDD65	0.0124	0	MarHDD65	0.0495	0	MarHDD65	0.1610	0
MayHDD65	0.0101	0	AprHDD65	0.0424	0	AprHDD65	0.1340	0
JunHDD65	0.0078	0	MayHDD65	0.0241	0	SepHDD65	0.0230	0
SepHDD65	0.0071	0	SepHDD65	0.0156	0	OctHDD65	0.1900	0
OctHDD65	0.0108	0	OctHDD65	0.0338	0	NovHDD65	0.1450	0
NovHDD65	0.0124	0	NovHDD65	0.0454	0	DecHDD65	0.1720	0
DecHDD65	0.0120	0	DecHDD65	0.0368	0	DecHDD65	0.1157	5198
DecFebHDD50	0.0022	13370	DecFebHDD50	0.0237	4428			
		141BB7						
RUF	0.9500		RUF	1.0500		RUF	0.8895	
Apply RUF	134.782		Apply RUF	4.849		Apply RUF	4.624	
Dth Total	138.162		Dth Total	4,785		Dth Total	4,740	

1. Current model used for Choice Supplier Daily Demand and Peak Supply planning.
2. Model will also be used for SSO Peak Supply Planning.
3. Model will also be used to validate SSO Neural model on very cold days (≥ 66 HDD)
4. Blue Fields are to be input by SSO supplier.
5. Green Field is DDQ in Dth based on supplier input. In Section A., B., and C. there are Green Fields for calculations underlying each customer class.
6. Yellow columns are coefficients provided by Vectren. The Relative Usage Factor (RUF) scales each Choice Suppliers' 12 month consumption portfolio to the model.



INDUSTRIES

The Authoritative Source for the Natural Gas Industry

February 2000

[Back to Article Index](#)

How to forecast daily sendout demand
by Ronald H. Brown, Timothy M. Richardson,
and John E. Buchanan

The local distribution company faces many challenges in the business of supplying gas to its customers. The gas supply system of an LDC consists of gate stations, compressors, gas storage, and customers.

The LDC must operate these systems to assure delivery of gas in adequate volumes at required pressures under all circumstances. For efficient, economical, and safe operation, the daily gas sendout demanded by the customers must be known with some degree of accuracy.

The customer base of the LDC consists of many individual customers, each with unique demand characteristics. Customers use gas for space heating (known as heating load), for heating water, drying, cooking and baking, and other processes (known as base load), and for electric power generation.

The customer base is generally divided into three categories: residential, commercial, and industrial. The demand characteristics of these three categories differ significantly. The residential customer demands are typically temperature sensitive, increasing on weekends.

The commercial customers are also typically temperature sensitive, but decreasing on weekends. Industrial customer demand is much less temperature sensitive, decreasing significantly on weekends.

Factors affecting demand

Many factors affect gas usage. The most significant factor is temperature, as most gas is used for space heating. Analysis of the daily average temperature and the daily gas consumption for a region in Wisconsin shows the most obvious characteristic is gas consumption increases with decreasing average temperature, while consumption decreases with increasing temperature to a point. Once average temperature reaches a certain temperature, space heating no longer occurs; consumption levels are near some constant value known as base load. This nonlinear characteristic was observed long ago and used to define the heating degree day. Gas consumption versus average temperature for individual days has been plotted and it is also obvious to see that gas consumption is approximately proportional to HDD.

Another important factor is wind, in that buildings lose more heat on a windy day than on a calm day. Heat loss is also a dynamic process, hence weather factors from previous days have been shown to be contributing factors affecting gas consumption. Many industrial customers and some commercial customers shut down over weekends. Thus the day of the week can be used as a proxy to model this characteristic.

Many other potential factors exist such as solar radiation, direction of the wind, tap water temperature, holidays, bill shock, occupancy rates, and industrial production rates, to name a few. Some of these factors can be directly measured, while others cannot.

Methods for forecasting

Through the years, many methods have been used to predict daily sendout demand. Gas controllers have used and still use methods such as looking at usage patterns on similar historical days and scatter plots of usage versus HDD. Often these methods were only successfully applied by experts with years of experience at the LDC.

Along with deregulation of gas prices came the need to more accurately forecast customer demand for natural gas. Many LDGs have developed varying degrees of success. These models are developed using historical demand data along with other historical data and information, such as weather conditions and day of the week.

Multiple Linear Regression. Multiple linear regression is one of the most commonly used methods for prediction models. Its accuracy is limited, however, by the assumption of a linear relationship between the input factors and the output.

Artificial Neural Networks. Artificial Neural Networks are mathematical constructs that are capable of mapping any continuous nonlinear algebraic function. The ANN acquires knowledge through a training process. Modelers of gas consumption have been attracted to ANNs because of this capability of mapping unknown nonlinear relationships between inputs and the output. In addition, the training process builds an input-output relationship that interpolates well to a situation that may not exactly match the training.

While an ANN is quite good at interpolating a solution that was not presented during training, it is not as good at extrapolating outside the domain of the training knowledge. For the gas estimation problem, this means that if the ANN model was not trained with historical data from days of extreme weather, the model will not perform as well on such days.

Introduction to ANNs

A typical ANN is made up of several layers. Layers, in turn, are made up of several neurons. Each neuron consists of interconnecting weights, a summation junction, and an activation function.

The architecture. In neurons, the incoming signals, known as input vectors, are each multiplied by their respective weights and summed along with a weighted offset (this much of the neuron is equivalent to a multiple regression model). The sum is the input to a nonlinear activation function. The output of the activation function is the output of the neuron and is either an input to several other neurons or the output of the ANN.

Several neurons operating on the same inputs form a layer. In a feed-forward ANN, the output of these neurons forms the inputs to the next layer. The ANN is formed by the interconnection of several layers.

Forward Propagation. The ANN is evaluated by setting the inputs to appropriate values. The neurons in the first layer are evaluated producing inputs to the second layer. The second layer is then evaluated producing inputs to the third layer. Finally, the third layer is evaluated producing the outputs of the ANN.

Training an ANN. The weights of the ANN are determined by training the ANN. A training data set, consisting of known input-vector, output-vector pairs, is needed to train the ANN. Initially, the weights are set to random values. The most common method for setting the weights is known as back propagation. This method is a steepest gradient descent algorithm. The method consists of:

1. The input vector is presented to the ANN for forward propagation.
The ANN output vector is calculated.
2. The error between the ANN output vector and the training output vector is calculated.
3. The partial derivative of this error with respect to each weight is calculated.
4. Using the partial derivatives of the error, each weight is adjusted in the direction to reduce the ANN output vector error.

A training epoch consists of repeating this procedure for each pair of vectors in the training set. Typically, hundreds, thousands, or even tens of thousands of epochs will be run to train an ANN.

VEDO Daily Demand Forecast						
Date	1/16/2007	1/17/2007	1/18/2007	1/19/2007	1/20/2007	1/21/2007
Day of the Week	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1. Forecasted Total System Demand Dth (ANN Model)	+ 307,814	285,015	274,689	314,847	306,445	276,144
2. Forecasted Temperatures	- 23	27	30	22	22	28
3. Forecasted Degree Days	- 42	38	35	43	43	37
4. Total Traditional Large GT (Nominations)	- 72,781					
5. Total Choice (Nominations)	- 55,989					
6. Choice Projections (Day ahead Forecasts)		48,822	44,806	55,125	46,867	44,755
7. Net Demand (Future SSO)	= 179,044	163,412	157,102	186,941	186,797	158,608

1. Forecasted demand for the entire VEDO system using an Artificial Neural Network model
2. Forecasted average daily temperature
3. Forecasted degree days
4. Total Traditional Gas Transportation nominations
5. Total Choice Nominations
6. Total Choice forecasted DDQs
7. Net SSO Demand - based on ANN model reduced by Choice forecast and LGT nominations.

34	0%	20%	75%	0%	10%	0%	0%	0%	50%
35	0%	20%	75%	0%	10%	0%	0%	0%	50%
36	0%	20%	75%	0%	10%	0%	0%	0%	50%
37	0%	20%	75%	0%	10%	0%	0%	0%	50%
38	0%	20%	75%	0%	10%	0%	0%	0%	50%
39	0%	20%	75%	0%	10%	0%	0%	0%	50%
40	0%	20%	75%	0%	9%	0%	0%	0%	50%
41	8%	20%	72%	0%	9%	0%	0%	9%	50%
42	7%	50%	20%	69%	0%	9%	0%	17%	50%
43	7%	50%	20%	69%	0%	8%	0%	8%	50%
44	7%	50%	20%	69%	0%	8%	0%	8%	50%
45	7%	50%	20%	69%	0%	8%	0%	17%	50%
46	7%	50%	20%	69%	0%	8%	0%	16%	50%
47	7%	50%	20%	69%	0%	8%	0%	16%	50%
48	7%	50%	20%	69%	0%	8%	0%	16%	50%
49	7%	50%	20%	69%	0%	8%	0%	16%	50%
50	6%	49%	20%	69%	0%	8%	0%	8%	49%
51	6%	49%	20%	69%	0%	8%	0%	8%	49%
52	6%	48%	20%	69%	0%	8%	0%	15%	48%
53	13%	48%	30%	63%	0%	8%	0%	15%	48%
54	12%	47%	30%	62%	0%	7%	0%	15%	47%
55	12%	46%	30%	62%	0%	7%	0%	15%	46%
56	12%	46%	30%	62%	0%	7%	0%	14%	45%
57	12%	45%	30%	61%	0%	7%	0%	14%	45%
58	12%	45%	30%	61%	0%	7%	0%	14%	45%
59	12%	44%	30%	61%	0%	7%	0%	14%	44%
60	11%	44%	30%	62%	0%	7%	0%	14%	44%
61	11%	43%	30%	61%	0%	7%	0%	14%	43%
62	11%	43%	30%	60%	0%	7%	0%	13%	43%
63	11%	42%	30%	60%	0%	7%	0%	13%	42%
64	11%	42%	30%	59%	0%	7%	0%	13%	42%
65	11%	41%	30%	59%	0%	7%	0%	13%	41%
66	11%	41%	30%	59%	0%	6%	0%	13%	41%
67	11%	40%	30%	59%	0%	6%	0%	13%	40%
68	11%	40%	30%	58%	0%	6%	0%	12%	39%
69	10%	40%	30%	58%	0%	6%	0%	10%	38%
70	10%	39%	30%	58%	0%	6%	0%	12%	38%
71	10%	39%	30%	58%	0%	6%	0%	10%	38%
72	10%	38%	30%	58%	0%	6%	0%	10%	38%
73	10%	38%	30%	57%	0%	6%	0%	10%	38%
74	10%	38%	30%	57%	0%	6%	0%	10%	38%

75	10%	37%	30%	57%	0%	6%	0%	12%	10%	37%
76	10%	37%	30%	57%	0%	6%	0%	12%	10%	37%
77	10%	36%	30%	56%	0%	6%	0%	11%	10%	36%
78	9%	36%	30%	56%	0%	6%	0%	11%	9%	36%
79	9%	35%	30%	56%	0%	6%	0%	11%	9%	35%
80	9%	35%	30%	56%	0%	6%	0%	11%	9%	35%

TCO Nominations will need to be allocated between Market Areas 3 and 6 per TCO nomination requirements.

Collective Delivery Levels for Gano Road Station (Bth)

Ranger of Daily Delivery's (Dith) from Local Producer - Pinnacle Road

Delivery Volumes for PepI Rural (DayP) (Dth)

Attachment 24A

Vectren Energy Delivery of Ohio, Inc.
Monthly Heating Value Factor for 2005

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/MMBTU)
January 2005			1.024
February 2005			1.023
March 2005			1.021
April 2005			1.023
May 2005			1.022
June 2005	1,737,796	1,773,993	1.021
July 2005	1,566,682	1,599,846	1.021
August 2005	1,698,283	1,729,778	1.019
September 2005	1,837,622	1,865,509	1.015
October 2005	3,214,058	3,273,434	1.018
November 2005	5,258,301	5,374,288	1.022
December 2005	8,962,354	9,224,084	1.029
Totals for 2005	24,275,096	24,840,932	1.023

Vectren Energy Delivery of Ohio, Inc.
Monthly Heating Value Factor for 2006

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2006	6,709,388	6,837,633	1.019
February 2006	7,355,803	7,502,494	1.020
March 2006	6,333,428	6,450,017	1.018
April 2006	2,935,939	2,988,877	1.018
May 2006	2,475,074	2,513,522	1.016
June 2006	1,831,739	1,867,726	1.020
July 2006	1,740,742	1,770,590	1.017
August 2006	1,683,444	1,712,463	1.017
September 2006	1,886,813	1,914,690	1.015
October 2006	3,817,449	3,890,429	1.019
November 2006	5,060,785	5,166,572	1.021
December 2006	6,637,638	6,761,105	1.019
Totals for 2006	48,468,242	49,376,118	1.019

Vectren Energy Delivery of Ohio, Inc.
Monthly Heating Value Factor for 2007

	(MCF DRY)	(MMBTU)	(BTU/CF DRY)	BTU CONTENT	AVERAGE	WEIGHTED
January 2007	8,181,042	8,348,642	1,020			
February 2007	10,038,021	10,278,485	1,024			
March 2007	5,419,848	5,529,493	1,020			
April 2007	4,455,209	4,544,010	1,020			
May 2007	1,970,895	2,009,621	1,020			
June 2007	1,663,270	1,700,618	1,022			
July 2007	1,648,192	1,677,647	1,018			
August 2007	1,664,105	1,697,671	1,020			
September 2007	1,628,450	1,661,111	1,020			
October 2007						
November 2007						
December 2007						
Totals for 2007	36,669,032	37,447,298	1,021			

Attachment 25A

Below is an example of how Customer Load would be calculated as the basis for capacity allocation that will follow migrating customers. For simplicity this example demonstrates the method to calculate residential load. The same method would be used for small commercial and large commercial class loads as well for inclusion of the monthly allocation. Vectren calculates weighting factors called Relative Use Factor (RUF) for each of the Choice or SSO customer portfolios. RUFs are calculated for each of the three customer classes utilized in VEDO: residential, small commercial and large commercial. The Vectren billing system generates a report of Historic 12 month CCF usage for Choice eligible customers by service class. Included in the report is projected pool migration. From this we calculate the pending month customer counts and usage. An average Use Per Customer (UPC) is calculated for each supplier pool. These are divided by total Choice Eligible UPC to calculate the monthly weighting factor (RUF). Pending customer counts, updated weighting factor and peak design day criteria are used to project the peak load for each class.

Pending Month Residential Customer Base

	Customer Count	Weighting (RUF)	Resulting Load
Choice 1	12138	1.153956	17,633
Choice 2	14519	1.048096	19,157
Choice 3	51358	1.034333	66,876
SSO	208485	0.979230	257,015
VEDO Total	286500	1.000000	360,682

The Small Commercial and Large Commercial loads would be calculated in the same manner as Residential in order to arrive at each supplier's total peak load and their respective share. The resulting share of peak load would then be used to assign/allocate capacity for Choice and SSO Suppliers.

Pending Month Load Allocation

	Resulting Residential Load	Resulting Small Com. Load	Resulting Large Com. Load	Forecast Total Peak Load	Share of Peak Load
Choice 1	17,633	5,009	1,055	23,697	4.78%
Choice 2	19,157	9,017	1,888	30,072	6.07%
Choice 3	66,876	6,011	1,285	74,152	14.97%
SSO	257,015	92,002	18,447	367,464	74.18%
VEDO Total	360,682	112,039	22,885	495,386	100.00%

System wide average uses are reported below. This is data is offered as a benchmark only. Allocation will be based on each Supplier's actual use migration by individual customer.

Attachment 25A Cont'd.

Typical 12 month Usage By Class (CCF)	
Residential	768.01
Small Commercial	3069.53
Large Commercial	11,850.46

Attachment 29A

SSO Supplier Fixed Collateral Requirement	
PARTICIPATION COLLATERAL REQUIREMENT (PCR)	
FIXED CREDIT REQUIREMENT (FCR)	
Pipeline Charges (PC)	
Storage Charges (SC)	
FIXED COLLATERAL REQUIREMENT (FCR)	
<p>The financial evaluation shall be based on the participating SSO Supplier's ability to meet the credit requirements of two tranches, whether to allow for winning up to two tranches or to ensure that under a default scenario the Suppliers would have adequate credit to cover the remaining exposure.</p> <p>*Credit is allocated in \$50,000 blocks.</p>	
PARTICIPATION COLLATERAL REQUIREMENT (PCR)	shall be the sum of the Fixed Credit Requirement (FCR) plus Liquid Collateral Requirement (LCR).
FIXED COLLATERAL REQUIREMENT (FCR)	Less Maximum Unsecured Credit Limit (MUCL), granted, if any.
Pipeline Charges (PC)	Charges will be estimated per tranche, using a historical view of pipeline charges which may include pipeline reservation charges, delivery charges, etc.
Storage Charges (SC)	Charges will be estimated per tranche using billed invoices to approximate the amount of expected yearly storage charges per tranche including demand, deliverability, and storage.
MAXIMUM UNSECURED CREDIT LIMIT (MUCL)	Amount of unsecured credit granted (if any), through the creditworthiness evaluation process.
<p>In the event of a SSO Supplier default, VEDO reserves the right to offset any costs or penalties incurred by non-defaulting SSO Suppliers, Choice Suppliers, Transport Customers, Pooling Operators or VEDO that are above and beyond the fixed collateral requirement.</p> <p>Pooling guidelines dictate that 100% of winter volumes shall be hedged, thus any amount of MTM credit exposure from hedges that in the money will be tracked and evaluated against expected Customer Payments to the purpose of determining a Supplier's total credit exposure. If the MTM exposure exceeds the value of the expected Customer Payments, VEDO will take remaining exposure exposure and net it against any remaining unsecured credit granted, if any. If this remaining MTM credit exposure exceeds the unsecured credit granted, then VEDO will margin the remaining amount with cash or a letter of credit.</p>	
SSO Supplier Liquid Collateral Requirement	
Liquid Collateral Requirement (LCR)	
YEARLY DEMAND QUANTITY (YDQ)	Forecasted yearly volume of deliveries.
COMMODITY ADDER (CA)	Per Dth price paid per yearly demand quantity to cover the commodity & pipeline risk.
Liquid Collateral Requirement (LCR) -Product of Commodity Adder (CA) and the Yearly Demand Quantity (YDQ)	
<p>The amount of the Liquid Collateral Requirement can change due to (a) a revised estimate of the volumes remaining in the term of the SSO Supplier Agreement and (b) changes in the volume weighted average of forward NYMEX Henry Hub price curve for the volumes remaining in the term of the SSO Supplier Agreement. For each \$1 increase in the volume weighted average of forward NYMEX Henry Hub price curve of remaining volumes, the Commodity Adder will be increased by \$0.10. The minimum Commodity Adder shall be \$0.25. Commodity requirement decreases due to reduced remaining volumes will occur every three months from the start of SSO Service.</p>	

Attachment 31A**VECTREN ENERGY DELIVERY OF OHIO****RECEIVABLES TIMELINE EXAMPLE**

Bill Cycle	Scheduled Read Date		Billing Date		# of days with SSO Receivables	Bill Cycle	Read Date	PM	# of days with SSO Receivables	Billing Date		PM	Bill Cycle	Read Date	PM	# of days with SSO Receivables
	Bill	Scheduled	Read	Date						Bill	Scheduled					
1	Wed	Mar 28	Fri	Mar 30	0	1	Thur	Apr 01	30	1	Fri	Apr 05	Tues	May 01	29	29
2	Thu	" 29	Mon	Apr 02	0	2	Fri	Apr 03	31	2	Mon	"	Wed	"	30	31
3	Fri	" 30	Tue	Apr 03	0	3	Mon	Apr 04	02	3	Tue	"	Thu	"	31	29
4	Mon	Apr	Wed	Apr 04	2	4	Tue	Apr 05	03	4	Wed	"	Fri	Jun 01	1	29
5	Tue	"	Thu	Apr 05	3	5	Wed	Apr 06	04	5	Thur	"	Mon	"	4	29
6	Wed	"	Fri	Apr 06	4	6	Thur	Apr 07	05	6	Fri	Apr 08	Tue	"	5	29
7	Thu	"	Mon	Apr 09	5	7	Fri	Apr 10	08	7	Mon	"	Wed	"	6	31
8	Fri	"	Tue	Apr 10	6	8	Mon	Apr 11	09	8	Tues	"	Thu	"	7	29
9	Mon	"	Wed	Apr 11	9	9	Tues	Apr 12	10	9	Wed	"	Fri	"	6	29
10	Tue	"	Thu	Apr 12	10	10	Wed	Apr 13	11	10	Thur	"	Mon	"	11	29
11	Wed	"	Fri	Apr 13	11	11	Thur	Apr 14	12	11	Fri	"	Tue	"	12	29
12	Thu	"	Mon	Apr 16	12	12	Tue	Apr 15	13	12	Mon	"	Wed	"	13	31
13	Fri	"	Tue	Apr 17	13	13	Mon	Apr 16	15	13	Tue	"	Thu	"	14	29
14	Mon	"	Wed	Apr 18	14	16	Tue	Apr 17	17	14	Wed	"	Fri	"	15	29
15	Tue	"	Thu	Apr 19	17	15	Wed	Apr 18	18	15	Thur	"	Mon	"	16	29
16	Wed	"	Fri	Apr 20	18	16	Thur	Apr 19	19	16	Fri	"	Tue	"	19	29
17	Thu	"	Mon	Apr 23	19	17	Fri	Apr 22	20	17	Mon	"	Wed	"	20	31
18	Fri	"	Tue	Apr 24	20	18	Mon	Apr 23	21	18	Tue	"	Thu	"	21	29
19	Mon	"	Wed	Apr 25	23	19	Tue	Apr 24	22	19	Wed	"	Fri	"	22	29
20	Tue	"	Thu	Apr 26	24	20	Wed	Apr 25	23	20	Thur	"	Mon	"	25	29
21	Wed	"	Fri	Apr 27	25	21	Thur	Apr 26	21	21	Fri	"	Tue	"	26	29

NOTE: READ AND BILL DATES ARE FROM 2007 AND ARE FOR EXAMPLE PURPOSES ONLY.

Attachment 32A

SSO and Choice Monthly Reconciliation Example							
Scheduled Deliveries (Scheduled per DDQ)						4,944,436	
Propane						-	
TCO NNS Activity other than Large Cash Out						80,641	
Effective deliveries						5,025,077	Equal E from allocation of sendout.
Usage (CIS Billing - Banner allocated to month of use)						5,189,221	
Initial PDA	SSO1	SSO2	SSO3	Choice1	Choice2	5,00%	
	26.67%	26.67%	26.67%	15.00%	5.00%		
Scheduled Deliveries	1,287,733	1,287,733	1,287,733	810,927	270,309	=	4,944,436
Propane @PDA	-	-	-	-	-	=	-
Non Large NNS TCO @PDA	21,504	21,504	21,504	12,096	4,032	=	80,641
Effective Deliveries	1,309,238	1,309,238	1,309,238	823,023	274,341	=	5,025,077
Pool Usage (CIS-Banner)	1,370,868	1,370,868	1,370,868	807,453	269,154	=	5,189,221
Percent of Billing	26.4176%	26.4176%	26.4176%	15.5804%	5.1868%	=	100%
Required Delivery	1,327,505	1,327,505	1,327,505	781,922	260,641	=	5,025,077
Pool Variance (Dth) *1	18,267	18,267	18,267	(41,102)	(13,701)	=	(0.08)
LGT Balancing							
Pro Rata Share of Dth	15,340	15,340	15,340	8,623	2,876	=	57,526 @index price
Delivery Variance Volumes	18,267	18,267	18,267	(41,102)	(13,701)	=	(0)
LGT Bal Volumes	15,340	15,340	15,340	8,623	2,876	=	57,526
Total Volumes to Bill	33,608	33,608	33,608	(32,473)	(10,824)	=	57,526
Proof = $\int (Billing \% - Deliveries \%) \times throughput = pool variance$							
Billing %	26.4176%	26.4176%	26.4176%	15.5804%	5.1868%	=	100%
Deliveries % *2	26.0541%	26.0541%	26.0541%	16.3753%	5.4594%	=	100%
% Variance	0.3635%	0.3635%	0.3635%	-0.8179%	-0.2726%	=	0%
Throughput	5,025,077	5,025,077	5,025,077	5,025,077	5,025,077	=	
Variance Volume	18,267	18,267	18,267	(41,102)	(13,701)	=	0
*1 Pool Variance is the amount to cashout on Pool operator bill.							
*2. PDA percentage if DDQs are made in exact proportion to PDA In practice DDQ's are not exactly proportionate. SO factor is more correctly defined as % of effective deliveries.							

Attachment 40A

VEDO SSO ESTIMATED IMPLEMENTATION COSTS SUMMARIES	VEDO SCO ESTIMATED		IMPLEMENTATION COST SUMMARIES		
	LOW END ESTIMATE	HIGH END ESTIMATE	LOW END ESTIMATE	HIGH END ESTIMATE	HIGH END ESTIMATE
\$223,461	\$293,076		\$174,580	\$217,780	
\$78,760	\$108,540		\$104,060	\$178,460	
\$265,906	\$291,601		\$11,497	\$37,897	
\$27,726	\$32,908		\$1,047,937	\$1,251,267	
\$154,990	\$209,980		\$30,700	\$57,300	
\$41,800	\$41,800		\$203,104	\$245,344	
\$108,185	\$134,585		\$40,000	\$55,000	
			\$3,080	\$5,000	
			\$65,220	\$92,620	
Allocations (8.675%)	\$78,147	\$36,509			
			\$145,842	\$185,703	
			\$2,805,995		
			\$3,535,370		

*Implementation costs are considered estimates until such time as detailed requirement and design sessions are complete.

Budgets will be updated to reflect new projected costs estimates as details become available.

Attachment 47A

VEDO Large Transport Tolerance Report	
Tolerance - Total System	Days out of tolerance
5%	68
10%	33
15%	20
20%	12
25%	5
30%	2
35%	0
40%	0
45%	0
50%	0
55%	0
60%	0
65%	0
70%	0
75%	0
80%	0
85%	0
90%	0
95%	0
100%	0
% of days > 15%	
Peak Daily Imbalance %	32%
Total no of days	122
Total no of months	4

Attachment 56A

In the event that a customer receiving service from a competitive supplier ("CRNGS") desires to term in a rate or at renew the underlying service agreement with that CRNGS, that customer will be directed to the incumbent CRNGS to effectuate the termination or discontinuation of the agreement. The incumbent CRNGS will provide that customer with two supply options: (a) the institution of service by another CRNGS that has agreed to participate in a default allocation procedure pursuant to which a customer who (a) wishes to terminate his agreement with an incumbent CRNGS and (b) does not make an affirmative election to be placed on SCO Service will be allocated to another CRNGS determined by sequential order for month-to-month service priced at the allocated CRNGS' standard monthly variable rate as evidenced on the Public Utilities Commission ("PUCO") Apples-to-Apples Price Comparison Chart. ("Default Allocation Procedure").

In the event that a customer affirmatively selects SCO Service, the CRNGS shall memorialize the affirmative election by an audio recording capturing, at a minimum, the following information:

- 1) Customer Name
- 2) Customer account number
- 3) Service location
- 4) Date of conversation
- 5) Confirmation that customer has the authority to transfer service to SCO Service
- 6) A description of the SCO Service, particularly:
 - a) that the price will change monthly
 - b) that the customer will be assigned sequentially to one of the approved SCO Suppliers whose name will then appear on future billing.
- 7) A statement by the customer manifesting an affirmative election of SCO Service

In the event the customer fails to make an affirmative election to SCO Service or expresses an interest in service pursuant to the Default Allocation Procedure, the incumbent CRNGS shall memorialize the customer's default allocation by an audio recording capturing, at a minimum, the following information:

- 1) Customer name
- 2) Customer account number
- 3) Service location
- 4) Date of conversation
- 5) Confirmation that the customer has authority to effectuate a default allocation
- 6) A description of the allocation process and pricing, particularly:
 - a) that the customer's account will be allocated in sequential order to a CRNGS participating in the Default Allocation Procedure
 - b) that the default allocation service is a month-to-month service which can be cancelled by the customer without penalty or fee
 - c) that the price will be the standard monthly variable price offered by the participating CRNGS and posted on the PUCO Apples to Apples Price Comparison Chart
 - d) that the customer will be receiving a letter of confirmation from the CRNGS who will be providing service to the customer.
- 7) A statement by the customer that he understands and agrees to default allocation service.

Attachment 58A

	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Total
DSE FUNDING - SSO PHASE										
LARGE GT										
CITY-GATE NON-COMPLIANCE CHARGE	17,141.00	8,303.00	9,414.00	9,179.50	11,492.50	9,221.50	7,692.50	7,886.50	7,023.00	87,233.50
DAILY OVER-DELIVERY PREMIUM	15,931.16	32,460.40	47,450.78	113,624.81	52,832.05	5,247.01	40,568.16	44,097.81	18,313.17	371,525.34
DAILY UNDER-DELIVERY PREMIUM	6,794.72	11,968.91	6,236.38	5,776.01	21,538.45	1,234.81	3,999.19	11,172.26	2,690.77	71,401.40
MONTHLY OVER-DELIVERY PREMIUM	301.10	-	-	306.80	-	456.72	-	-	497.40	1,764.52
MONTHLY UNDER-DELIVERY PREMIUM	1,216.34	2,075.56	983.06	219.10	2,847.94	3,695.13	12,864.93	3,402.48	4,311.46	31,593.20
OFO IMBALANCE CHARGE	-	-	-	-	-	43,530.00	108,000.00	-	-	151,530.00
CHOICE	-	-	-	-	-	-	-	-	-	-
CITY-GATE NON-COMPLIANCE CHARGE	-	9.00	290.00	922.00	-	1,336.00	93.00	431.00	16.00	3,037.00
DDO NON-COMPLIANCE CHARGE	-	-	-	-	-	773.00	-	172.00	60.00	90.121.00
OFO NON-COMPLIANCE CHARGE	-	1.00	-	-	-	30,120.00	-	-	-	-
	41,384.52	55,807.87	64,059.12	129,559.22	89,442.94	95,613.67	173,217.78	67,162.44	32,903.80	749,330.96
LARGE GT										
DAILY OVER-DELIVERY IMBALANCE CHARGE	(7,892.02)	(242,107.32)	(526,120.21)	(246,385.18)	(30,322.81)	(291,689.90)	(225,533.20)	(87,268.69)	(1,837,365.46)	
DAILY UNDER-DELIVERY IMBALANCE CHARGE	47,261.33	94,554.13	64,304.90	60,141.19	189,475.39	36,916.64	60,396.48	93,254.28	41,710.38	702,114.92
MONTHLY OVER-DELIVERY IMBALANCE CHARGE	(3,205.27)	-	(23,226.75)	(5,100.10)	-	(4,565.84)	-	-	(4,972.80)	(41,168.76)
MONTHLY UNDER-DELIVERY IMBALANCE CHARGE	24,249.55	41,504.34	45,805.32	4,380.79	56,921.18	73,815.74	257,100.59	67,982.57	86,058.79	657,913.24
CHOICE	-	-	-	-	-	-	-	-	-	-
DAILY NON-OFO CASH-OUT	-	(4.63)	-	-	-	6,706.16	-	1,580.37	53.25	-
OFO IMBALANCE CASH-OUT	(4,386.44)	(26,987.66)	(145,328.48)	(466,698.33)	15.39	189,525.81	25,907.27	(62,735.48)	36,956.13	(34,721.99)