

742 A. CNE witness Rozumialski suggests that nominations be expanded to include all
743 four North American Energy Standards Board ("NAESB") intra-day nominations
744 (CNE Ex. 2.0, p. 8).

745

746 **Q. What rationale did she use to justify this recommendation?**

747 A. Ms. Rozumialski stated that the LDC uses intra-day nomination on the interstate
748 pipelines but that since transportation customers were prevented from using the
749 same flexibility, that Nicor Gas must be using those opportunities for sales
750 customers. She reasoned that there exists a difference in the way that sales and
751 transportation customers utilize these resources.

752

753 **Q. How did Nicor Gas respond to CNE's recommendation?**

754 A. Mr. Bartlett states that Nicor Gas does not agree to CNE's recommendation
755 because it was rejected in the last case and it creates additional and unacceptable
756 operational uncertainty. (Co. Ex. 19.0, pp. 31-32)

757

758 **Q. What do you recommend with regard to intra-day nominations?**

759 A. I recommend that the Commission order Nicor Gas to implement a pilot program to
760 provide the evening nomination (6 PM) on a firm basis and the Intra-day 1
761 nomination (10 AM) on a best-efforts basis to allow us to study the effects and
762 feasibility of this service. In its surrebuttal, Nicor Gas should provide a cost
763 estimate of providing this increased service

764

765 **Q. What is the basis for your recommendation?**

766 A. My recommendation would provide a measured step toward balancing the flexibility
767 clearly enjoyed by Nicor Gas while not over-burdening Nicor Gas with an
768 unworkable solution. The use of a pilot program enables a more thorough analysis
769 to be conducted in a subsequent rate proceeding.

770

771 **2. Trading of stored gas**

772 **Q. What did Vanguard Energy Services ("VES") witness Mr. Anderson**
773 **propose with regard to "Imbalance Traded Gas"?**

774 A. Mr. Anderson proposed that Nicor Gas provide an expansion of its imbalance
775 trades that allow its transportation customers to trade the inventory in their SBS.
776 Specifically, Mr. Anderson proposed that these trades be offered as they are
777 currently offered in Peoples Gas and North Shore Gas (VES Ex. 1.0, pp. 3-5).

778

779 **Q. How did Nicor Gas respond to VES's recommendation?**

780 A. Mr. Mudra states Nicor Gas does not agree to Mr. Anderson's recommendation
781 (Co. Ex. 29.0, pp. 31-32). Nicor Gas does not provide any substantive response.

782

783 **Q. What do you recommend with regard to trading of storage gas?**

784 A. I recommend that the Commission approve VES' recommendation and order Nicor
785 Gas to provide for trading of stored gas under the same circumstances that it
786 approved in Peoples Gas and North Shore gas in dockets 07-0240/07-0241.

787

788 **Q. What is the basis for your recommendation?**

789 A. Nicor Gas' objections are on the form of the proposal (that it should not be referred
790 to as an "imbalance" trade and that revenues are to cover costs, not earn profits)
791 but not that Nicor Gas cannot provide the service, that the provision of this service
792 would degrade its ability to serve its other customers or it would harm other
793 customers. Nicor Gas already provides this service only when a customer has a
794 full bank on the excess gas and has a cost-based fee to cover those costs.

795

796 **3. Timing of MDCQ**

797 **Q. What did VES propose with regard to the timing of the MDCQ calculation?**

798 A. Currently Nicor Gas calculates the MDCQ in April using the previous calendar
799 year's usage. VES objects as this excludes the most recent winter usage. VES
800 argues that the MDCQ should be based on the most recent period of December
801 through March. (VES Ex. 1.0, p. 7)

802

803 **Q. What rationale did it use to justify this recommendation?**

804 A. According to VES, Peoples Gas and North Shore Gas both calculate their MDCQ
805 according to the most recent heating season using the. Both Peoples Gas and
806 North Shore Gas use the "highest daily demand during the most recent December
807 through February."

808

809 **Q. How did Nicor Gas respond to VES's recommendation?**

810 A. Mr. Mudra states this is not workable because two other tariff requirements make
811 inclusion impossible. (Co. Ex. 29.0, pp. 30-31) However, Nicor Gas does not
812 provide any insight into whether those other requirements could be modified by
813 moving them later in the year to allow inclusion.

814

815 **Q. What do you recommend with regard to the timing of the MDCQ calculation?**

816 A. Unless Nicor Gas provides a more thorough reason why it cannot calculate MDCQ
817 later to allow inclusion of the more recent heating season, I recommend that the
818 calculation be made late enough to include the most recent heating season and
819 that any other tariff requirements that need to be shifted to make this possible be
820 ordered. However, I do think that the entire year May through April should be used
821 to account for those customers with seasonal usage pattern that may use very little
822 gas during the winter.

823

824 **Q. What is the basis for your recommendation?**

825 A. Since natural gas service is largely linked to the heating season, it makes more
826 sense to use a complete heating season to calculate the MDCQ than to use a
827 calendar year.

828

829 **4. Super-pooling on Critical Days**

830 **Q. What did CNE propose with regard to super-pooling on critical days?**

831 A. CNE witness Rozumialski suggests that super-pooling be extended to include
832 critical day penalties as well as the injection targets. (CNE Ex. 2.0, p. 18)

833

834 **Q. What rationale did she use to justify this recommendation?**

835 A. Ms. Rozumialski argued that the Commission has already approved these
836 provisions in Docket No. 04-0779 and the same logic applies here as well.

837

838 **Q. How did Nicor Gas respond to CNE's recommendation?**

839 A. Mr. Mudra argues this is unnecessary for four reasons: 1) the groups expanded in
840 Docket No. 04-0779, 2) the order is limited to critical days, 3) the calculation is
841 complex, and 4) there would have to be subsequent significant changes to Nicor
842 Gas' billing and programming. In addition, Nicor Gas argued that only 15 CDs have
843 occurred in the past 12 years. (Co. Ex. 29.0, pp. 33-35)

844

845 **Q. What do you recommend with regard to super-pooling on critical days?**

846 A. I recommend that the Commission approve the provision. Also the Commission
847 ought to allow super-pooling if Nicor Gas' proposed MDN reductions are approved,
848 i.e., the cycling target.

849

850 **Q. What is the basis for your recommendation?**

851 A. Those groups were also allowed in the Order from 04-779 in conjunction with
852 super-pooling, so one cannot conclude that the larger pools mean that there is
853 no need for this provision. Also, because no party proposed super-pooling CD
854 charges in 04-0779, does not preclude them from doing so at this time. The logic of
855 the super-pooling argument was accepted by the Commission and the Company

856 has put forth no rationale for a change. .The logic behind super pooling is to take
857 advantage of the benefits of diversity amongst transportation customers where the
858 positive actions of one customer cancels the negative actions of one customer. This
859 would be most likely to be the case in the assessment of CD penalties. Lastly, just
860 because the Company claims that it has only happened 15 times in 12 years and
861 would require significant changes; this does not indicate actual benefits would be
862 less than the cost. The cost of imbalances that occur on critical days is extremely
863 high, so that the value of the trading would also be commensurately high.
864 Additionally, the same basic method already exists for grouping customers for
865 super-pools.

866

867 **5. Seasonal usage maximum**

868 **Q. What did VES propose with regard to seasonal usage maximum?**

869 A. VES recommends that the annual maximum on seasonal service be increased
870 from 250,000 therms to 1.5 million therms. (VES Ex. 1.0 pp.5-7)

871

872 **Q. What rationale did it use to justify this recommendation?**

873 A. VES argues that this change would allow for more customers to qualify for seasonal
874 service. Currently, these customers with a seasonal load profile pay a distribution
875 charge that does not reflect the reduced costs that Nicor Gas faces to service these
876 customers.

877

878 **Q. How did Nicor Gas respond to VES's recommendation?**

879 A. Mr. Mudra objects to an expansion to the seasonal maximum stating that there will
880 likely be a small demand for it from larger customers and it will complicate the rate-
881 making process. (Co. Ex. 29.0, pp-22-23)

882

883 **Q. What do you recommend with regard to seasonal usage maximum?**

884 A. Unless Nicor Gas provides a more substantial reason why it cannot offer seasonal
885 service to larger customers, I recommend that the seasonal usage annual
886 maximum be increased from 250,000 therms to 1.5 million therms.

887

888 **V. Tariff Revisions Affecting Customer Select Customers**

889 **Q. What issues have interveners raised with regard to Nicor Gas' small
890 customer transportation service, Customer Select ("CS")?**

891 A. Two interveners Customer Select Gas Suppliers, ("CSGS") and the Coalition for
892 Equal Access and Fair Utility Rates. Nicor Gas reached an understanding with
893 CSGS and settled their issues to the extent that CSGS accepted Nicor Gas's
894 position. Therefore, I will provide a brief summary of the issues and the settlement
895 on those issues no longer disputed.

896

897 **A. Customer Select Balancing Charge ("CSBC")**

898 **Q. What did CSGS propose with regard to the CSBC?**

899 A. CSGS proposed that the Nicor Gas eliminate or decrease the CSBC.

900

901 **Q. What rationale did it use to justify this recommendation?**

902 A. CSGS states that it does not make equal usage of upstream assets and thus
903 should not be charged for these services.

904

905 **Q. How did Nicor Gas respond to CSGS's recommendation?**

906 A. Nicor Gas and CSGS reached an agreement on this and the details are contained
907 in the Memorandum of Understanding ("MOU") which is Co. Ex. 29.3. The charge
908 will not change but increased access and days of balancing capacity will allow CS
909 customers to more equally share in those assets.

910

911 **Q. What do you recommend with regard to the CSBC?**

912 A. I recommend that the MOU be approved by the Commission as it relates to this
913 issue. I also recommend that this issue be looked at again with regard to the issue
914 of whether the balancing assets should be equally allocated to sales and CS
915 customers.

916

917 **Q. What is the basis for your recommendation?**

918 A. In both its direct and rebuttal cases, Nicor Gas stated that CS customers use
919 upstream assets equally and are appropriately charged an equal amount. I took
920 issue with this statement as did CSGS in direct testimony. However, when Nicor
921 Gas witness Mudra provided his rebuttal workpapers, I was able to determine that
922 both he and Mr. Bartlett had over-simplified the situation resulting in the false
923 impression that they were talking about *all* upstream assets.

924

925 **Q. What do you conclude with regard to the Nicor Gas' treatment of the**
926 **upstream assets and the CSBC?**

927 A. It is clear from Mr. Mudra's workpapers that the Company has two treatments for its
928 upstream assets. One set gets allocated and recovered from sales customers
929 through the PGA while a portion is credited back to CS customers through the
930 Transportation Service Adjustment ("TSA"). This set is those assets that do not
931 provide for balancing services and market haul. The rest of these assets are
932 allocated and recovered to CS customers through the CSBC

933

934 **Q. Do you still object to the methods of calculating the CSBC?**

935 A. No. When Nicor Gas provided its work papers, which fully explained the methods
936 that it used, my objection was eliminated. Though its testimony did not make it
937 clear, the process that Nicor Gas uses to allocate and recover those costs appears
938 reasonable. I think that Nicor Gas' actual process reflects an understanding that
939 CS customers are essentially different in the benefits they derive from Nicor Gas'
940 upstream assets and should be and are accorded a different allocation of those
941 costs.

942

943 **Q. Do CS customers or their marketers balance daily or only monthly?**

944 A. Nicor Gas maintains that CS customers balance their usage on a monthly basis
945 only and not on a daily basis. I conclude differently based on my understanding of
946 the delivery and balancing process used by CS marketers. If Nicor Gas had to

947 provide a monthly balancing service for CS customers, then they would not need
948 daily delivery ranges, and six days of operational balancing capacity.

949

950 **Q. How do the daily delivery ranges approximate daily usage?**

951 A. These daily delivery ranges require a marketer to deliver 95% -105% of the
952 estimated usage provided each day by the Company for each customer in their
953 groups. According to Nicor Gas response to DR DAS 7.12, those estimates are not
954 biased and average less than 5% variance from actual customer usage. Therefore,
955 the vast majority of each customer's gas is delivered by their marketer on a daily
956 basis.

957

958 **Q. How does six days of operational balancing capacity affect the balancing of**
959 **CS customers?**

960 A. The Company holds six days of operational balancing capacity of which at this time
961 only three days can be cycled. Mr. Bartlett, in response to DRs DAS 7.11, states
962 that Nicor Gas uses this capacity on an hourly basis to balance the difference
963 between estimated and actual usage and between usage and deliveries. Both of
964 the Company witnesses state that this capacity is used on an hourly, daily and
965 monthly basis. So the flexibility to make up the difference in hourly, daily and
966 monthly usage is at least partially made up from operational balancing capacity that
967 is required by Nicor Gas of the customer.

968

969 **Q. What do you conclude about balancing of CS customers?**

970 A. For these reasons, I believe that it is accurate to characterize the balancing of CS
971 customers as daily. However, because Nicor Gas and CSGS came to an
972 understanding, further discussion of this issue at this time is not necessary.

973

974 **B. Carrying cost of capital for working gas**

975 **Q. What did CSGS propose with regard to the carrying cost of capital for**
976 **working gas?**

977 A. CSGS proposed that the credit for the carrying costs associated with working gas
978 be updated. It also proposed that the credit be applied volumetrically to all CS
979 customers. (CSGS Ex. 1.0 Corrected, p. 12)

980

981 **Q. What rationale did it use to justify this recommendation?**

982 A. CSGS argued that the credit should reflect the current value of those carrying
983 costs. It also argues that since the cost is volumetric, the credit should be as well.

984

985 **Q. How did Nicor Gas respond to CSGS's recommendation?**

986 A. Nicor Gas accepted this proposal in the MOU. The proposed credit is \$.0037 per
987 therm.

988

989 **Q. What do you recommend with regard to the carrying cost of capital for**
990 **working gas?**

991 A. I agree with the MOU's treatment of this issue and recommend that the
992 Commission approve it.

993

994 C. **Customer Select Administrative fee**

995 Q. **What did CSGS propose with regard to the CS administrative fee?**

996 A. CSGS proposed that the administrative costs associated with the provision of CS
997 be recovered from all customers. (CSGS Ex. 1.0 Corrected, p. 19)

998

999 Q. **What rationale did it use to justify this recommendation?**

1000 A. CSGS argued that this is reasonable because all eligible customers benefit from
1001 the choice to take service under CS. Also, this is the Company's position on the
1002 Energy Efficiency fee.

1003

1004 Q. **How did Nicor Gas respond to CSGS's recommendation?**

1005 A. Nicor Gas accepted this proposal in the MOU.

1006

1007 Q. **What do you recommend with regard to the CS administrative fee?**

1008 A. I agree with the MOU's treatment of this issue and recommend that the
1009 Commission approve it.

1010

1011 D. **Access to Nicor Gas Assets**

1012 Q. **What did CSGS propose with regard to access to Nicor Gas assets?**

1013 A. CSGS proposed CS customers be allowed to directly control their proportional
1014 share of on and off system assets. (CSGS Ex. 1.0 Corrected, p. 7-8)

1015

1016 **Q. What rationale did it use to justify this recommendation?**

1017 A. CSGS wanted operational parity with sales customers, and, it asserted, this
1018 reduces risk for the LDC.

1019

1020 **Q. How did Nicor Gas respond to CSGS's recommendation?**

1021 A. Nicor Gas accepted this proposal in part in the MOU. They allowed the CS
1022 marketers to cycle the full six days of the operational balancing capacity.

1023

1024 **Q. What do you recommend with regard to access to Nicor Gas assets?**

1025 A. I agree with the MOU's treatment of this issue and recommend that the
1026 Commission approve it.

1027

1028 **E. Affiliate Access Issues**

1029 **Q. Were there any other interveners in this case that brought up equality
1030 issues with regard to Customer Select?**

1031 A. Yes. The Coalition for Equal Access and Fair Utility Rates ("CEAFUR") objected to
1032 various components of Nicor Gas' administration of its Customer Select Program.
1033 In particular, I identified two affiliate issues that are important and should be
1034 addressed. These two issues involve the use of Nicor Gas' website which links to
1035 its affiliate website and the Nicor Gas call centers that sell affiliate products and
1036 services to utility customers that.

1037

1038 1. **Use of Nicor's Gas website for advertising**

1039 **Q. What concerns do you have with Nicor's Gas website for affiliate**
1040 **marketing?**

1041 A. The websites which are provided on Nicor Gas bills are sponsored by Nicor Inc.
1042 and have links to affiliates which are promoting non-regulated products and
1043 services. Any website that appears on a customer's bill should not have a link to
1044 affiliates' resources. I went to the sites listed below.

1045 www.nicorgas.com

1046 www.nicorgas.com/myaccount, (which is the web address that appears on each
1047 customer's bill)³

1048 Both of these Nicor Gas webpages are hosted by the Nicor Inc. website and also
1049 include affiliate products and services in direct competition with Alternative Retail
1050 Gas Suppliers ("ARGS"). Additionally, I found that the Gas Line Comfort Guard
1051 ("GLCG") program, which Nicor Gas markets through its call centers, was located on
1052 the same page as Nicor Gas Advanced Energy CS programs.⁴

1053

1054 **Q. What issues does this create between affiliates and competitive gas**

³ Typing in "www.nicorgas.com" yields the following URL: http://www.nicor.com/en_us/residential/

Typing in "www.nicorgas.com/myaccount", which is the web address that appears on each
customer's bill, yields the following URL: <https://www3.nicor.com/MyAccount/loginmain.aspx>

⁴ http://www.nicor.com/en_us/nicor_services/section_overview/default.htm
includes both Lock 12 and GLCG

1055 **suppliers?**

1056 A. Both of these pages are hosted by Nicor Inc. and not Nicor Gas. It is technically
1057 correct to say that Nicor Gas does not have a website. The Nicor Inc.' website is
1058 not regulated by this Commission and customers of Nicor Gas are being sent to an
1059 "unregulated" site. From this site they can get information about the products and
1060 services of Nicor Gas' unregulated affiliate, Nicor Advanced Energy. While all the
1061 other ARGs are linked on this site, they are not allowed to solicit customers through
1062 the Nicor Inc. website.

1063

1064 **Q. How did Nicor Gas respond to CEAFUR's testimony on this issue?**

1065 A. Nicor Gas did not respond to this issue in its testimony. In its response to CEAFUR
1066 DRs about its website, Nicor Gas' only response implied that since the website was
1067 not owned by Nicor Gas but rather an affiliate, the objection to using that website to
1068 link customers to affiliates does not have merit.

1069

1070 **Q. What do you recommend with regard to the use of Nicor Gas' website for**
1071 **affiliate marketing?**

1072 A. I am troubled by the use of Nicor Gas' website for affiliate marketing. It would be
1073 advisable for Nicor Gas to have its own website instead of a website owned or
1074 operated by a parent or affiliate. Since ARGs are linked to the Nicor Gas portion of
1075 the website, Nicor Gas' ARGs should be provided with same type of link to its site
1076 when links are used. I agree with Staff witness Dianna Hathorn's
1077 recommendation that a proceeding should be initiated to investigate whether the

1078 Company's Operating Agreement is in the public interest and make to appropriate
1079 revisions . (See Staff Ex. 15.0, p. 18-22) In addition to the concerns Ms. Hathhorn
1080 has identified, Nicor Gas' use of the Nicor Inc. website and the potential for affiliate
1081 marketing to utility customers should be investigated.

1082

1083 **2. Use of Nicor Gas Call Centers for affiliate marketing**

1084 **Q. Do you have concerns with the information elicited from Nicor Gas with**
1085 **regard to the use of Nicor Gas call centers for affiliate marketing?**

1086 **A.** Yes. It is clear from Nicor Gas' responses to DRs IGS 2.35 and 2.37 that Nicor
1087 Gas is using its call centers to market affiliate products and services to its
1088 customers. This is inherently unfair to other providers of gas commodity and
1089 related products and services.

1090

1091 **Q. How did Nicor Gas respond to CEAFUR's testimony on this issue?**

1092 **A.** Nicor Gas did not respond to this issue in its testimony.

1093

1094 **Q. What do you recommend with regard to the use of Nicor Gas call centers for**
1095 **affiliate marketing?**

1096 **A.** Again, I agree with Staff witness Hathhorn that a proceeding should be initiated to
1097 investigate whether the Company's Operating Agreement is in the public interest
1098 and make to appropriate revisions. The use of Nicor Gas call centers for affiliate
1099 marketing should be addressed in that proceeding.

1100

1101 3. **Gas Line Comfort Guard ("GLCG") program**

1102 Q. **What did CEA Fur propose with regard to the Gas Line Comfort Guard**
1103 **program ("GLCG") that is provided by the Nicor affiliate Nicor Services?**

1104 A. CEA Fur proposed turning GLCG into a revenue producer for the utility instead of
1105 letting Nicor Services provide this service for Nicor Gas customers at unregulated
1106 monopoly rates.

1107

1108 Q. **Is the Gas Line Comfort Guard program offered to Nicor Gas customers at**
1109 **regulated prices?**

1110 A. No. This product is not provided by the utility. But it is offered at unregulated rates.
1111 However, the market for this service can hardly be described as competitive;
1112 therefore, the rates charged to Nicor Gas customers are neither subject to
1113 competitive forces nor covered by the ICC's jurisdiction.

1114

1115 Q. **What do you recommend with regard to the Gas Line Comfort Guard**
1116 **program?**

1117 A. This service should be investigated in the proceeding recommended by Staff
1118 witness Hathhorn, and if it is determined that the utility provides this service at all, it
1119 should be provided at regulated rates.

1120

1121 4. **Third-Party Billing Service**

1122 Q. **What did CEA Fur propose with regard to third-party billing service?**

1123 A. Third-party billing is not made available to all potential customers. One affiliate is
1124 charged rates that are below the tariff rate for similar billing services. Staff witness
1125 Dianna Hathorn addresses this issue. (See Staff Ex. 15.0, p. 21-22) I
1126 recommend that this issue be looked at during an investigation.

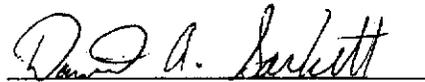
1127

1128 **Q. Does this conclude your prepared rebuttal testimony?**

1129 A. Yes.

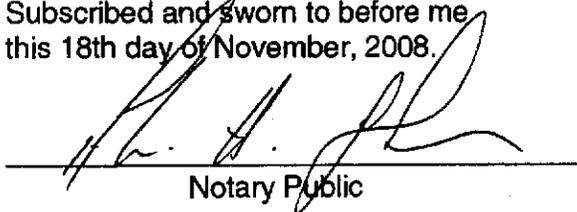
VERIFICATION

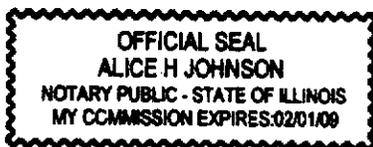
I, David Sackett, being first duly sworn, depose and state that I am a Economic Analyst III in the Policy Program of the Energy Division of the Illinois Commerce Commission; that I sponsor the foregoing Second Revised Rebuttal Testimony of David Sackett; that I have personal knowledge of the information stated in the foregoing Second Revised Rebuttal Testimony; and that such information is true and correct to the best of my knowledge, information and belief.



Illinois Commerce Commission

Subscribed and sworn to before me
this 18th day of November, 2008.


Notary Public



**Northern Illinois Gas Company
d/b/a Nicor Gas Company**

Ill.C.C. No. 16 - Gas

4th~~3rd~~ Revised Sheet No. 49
(Canceling 3rd~~2nd~~ Revised Sheet
No. 49, Effective October 3,
2001~~May 31,~~
~~1997~~)**Terms and Conditions**

(Continued from Sheet No. 48)

*** Transportation Limitations and Amounts.**

Daily Nominations will be accepted if received electronically by the Company no later than 11:30 A.M. on the business day prior to the gas day the Nomination is to be effective. The deadline for Nominations by any method other than the Company's electronic bulletin board is 8:00 A.M.

Changes to daily Nominations necessitated by the pipeline interruptions of Customer-owned gas supplies will be accepted if received by the Company and verified by the pipeline no later than 8:00 A.M. of the day the Nomination change is to be effective. On a Critical Day or an OFO Day, Nominations will be accepted if received by the Company no later than 8:00 A.M. of the day the nomination change is to be effective.

From November 1 through March 31 of each year, Nominations may not exceed ~~two (2)~~ times the Customer's Maximum Daily Contract Quantity. From April 1 through October 31 of each year, Maximum Daily Nominations (MDN) may not exceed the Customer's historical monthly usage for the period plus 25 percent of the Customer's allowed storage calculated on a daily basis. For the MDN periods of May through October, the 25 percent component of the Customer's allowable daily storage, shall first be multiplied by the Customer's applicable Storage Injection Factor (SIF). The SIF for April will be one (1). Such information to be provided by the Company to the Customer. The Company may accept anticipated monthly usage provided it is substantiated by the Customer.

The Company shall not, on any day, be obligated to accept Customer-owned gas at any location when Nomination of Customer-owned gas does not conform to procedures established herein.

*** Order of Deliveries.**

On any day, gas shall be delivered to the Customer as follows:

- a. Requested Authorized Use;
- b. Deliveries of Customer-owned gas to the Company from an interstate pipeline;
- c. Customer-owned gas withdrawn from storage under provisions of Storage Banking Service;
- d. Company-supplied gas under the Firm Backup Service;
- e. Authorized Use; and
- f. Unauthorized Use or OFO Non-Performance use.

*** Storage Banking Service and Firm Backup Service.**

Supplies for Critical Day use may be contracted for under Storage Banking Service (SBS) and Firm Backup Service (FBS). The Storage Banking Service capacity selected must be a minimum of 1 times the Customer's MDCQ. SBS capacity up to 26 times (23 times as of the first June 1 after the Effective Date of this tariff) the Customer's MDCQ will be available. Additional SBS capacity (greater than 26 (23) times the Customer's MDCQ) may be requested. Unsubscribe SBS capacity (as determined by the Company) will be allocated by the Company to all Customers requesting capacity exceeding 26 (23) times their MDCQ.

(Continued on Sheet No. 50)

Filed with the Illinois Commerce Commission on November 4, 2004~~October 2, 2001~~ Effective December 19,

Issued pursuant to Order of the Illinois Commerce Commission

2004~~October 3, 2001~~Issued by - Gerald P.
O'Connor~~George Behrens~~
Vice PresidentEntered July 5, 2001 in Docket Nos. 95-0219-00-0620 and 00-0621 Consolidated
Items in which there are changes are preceded
by an asterisk (*)Post Office Box 190
Aurora, Illinois - 60507

**Northern Illinois Gas Company
d/b/a Nicor Gas Company**

Ill.C.C. No. 16 - Gas
~~4th~~ Revised Sheet No. 50
(Canceling ~~3rd~~ Revised Sheet
No. 50, Effective October 3,
~~2001~~ May 31,
~~1997~~)

Terms and Conditions

(Continued From Sheet No. 49)

- * On November 1, Customer's that can annually subscribe to SBS shall have their elected SBS capacity filled to a minimum of 90 percent. A Storage Withdrawal Factor (SWF), expressed as a numerical value not to exceed 1.0, shall be determined by dividing the Customer's November 1 SBS inventory balance by their respective and then effective SBS capacity. Any SWF value greater than or equal to 0.90 shall be rounded 1.0. Any SWF less than 0.90 shall be rounded up to the next 0.01. A Customer's SWF shall be applied to their individual SBS withdrawals rights and serve to reduce their withdrawal rights on any Critical Day or OFO Shortage Day.
- * On April 1, Customer's that can annually subscribe to SBS shall have their SBS inventory balance reduced to a maximum of 10 percent. A Storage Injection Factor (SIF), expressed as a numerical value, shall be determined by subtracting from one (1), the result obtained from dividing the Customer's April 1 SBS balance by their respective elected SBS capacity. Any SIF value greater than or equal to 0.90 shall be rounded to 1.0. Any SIF less than 0.90 shall be rounded up to the next 0.01. A SIF shall be applicable to the 25 percent monthly storage injection component of each Customer's respective MDN quantities in effect beginning May 1 through October 31 of each year.
- * Terms available for withdrawal from storage on a Critical Day or OFO Shortage Day shall be limited to a Customer's SWF times 0.0210-0.23 times the Customer's Storage Banking Service capacity. Storage withdrawals are deemed to occur when Customer usage exceeds Requested Authorized Use and Customer-owned gas delivered.

A Customer may contract for delivery of Company-supplied gas under Firm Backup Service. The Company will provide gas up to the Firm Backup Service quantity on any day, including a Critical Day.

The Customer shall specify the SBS and FBS levels when initially contracting for service under any transportation rate.

A request for a transfer to a firm sales service rate, or a rate or rider which provides for a higher level of SBS or FBS, will be treated as a request for a change in the SBS or FBS.

An entity taking service at more than one location may contract for service as a Group. Each member of the Group shall individually contract for SBS and FBS. Nominations, SBS and FBS will be monitored at the group level in aggregate. However, on a Critical Day, Customers will be monitored on an individual basis for compliance with SBS and FBS selections. Customers electing service under Rider 25 will not be permitted to form a group with Customers electing service under any other transportation rate.

(Continued On Sheet No. ~~51~~50.1)

Filed with the Illinois Commerce Commission on ~~November 4, 2004~~ ~~October 2, 2001~~ Effective December 19,

Issued pursuant to Order of the Illinois Commerce Commission

Entered July 5, 2001 in Docket Nos. 00-0620 and 00-0621-Consolidated
Items in which there are changes are preceded
by an asterisk (*)

~~2004~~ October 3, 2001
Issued by - Gerald P.
O'Connor George M. Behrens
Vice President
Post Office Box 190
Aurora, Illinois 60507

Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Illinois Commerce Commission
Ill.C.C. Docket No. 08-0363
DAS Seventh Set of Data Requests

- DAS 7.22 Q. With regard to Nicor Gas Response to DR CNE 2.01, when Mr. Mudra calculates the amount he calls both the "Storage Banking Service capacity allocation" and the "Storage Banking Service allocation,":
- a. Define the term "Storage Banking Service capacity allocation" as used by the witness.
 - b. Has Nicor Gas ever used the term "Storage Banking Service capacity allocation" or calculated this amount in any rate proceeding before this Commission? If yes, please provide the precise citation to this usage.
 - c. Does this number refer to a current or proposed computation?
 - d. How does this capacity differ from the 35 Bcf of storage capacity allocated to SBS customers (excluding CS) as testified by Nicor Gas witness Mr. Bartlett (Ex. 4.0, p. 22, lines 456-457)?
 - e. In another DR response to IIEC 2.02 Corrected, Mr. Mudra states that the Storage Banking Service Allocation is 1,346,333. Should this number be the 1,346,333,000 that the witness used in his testimony?
 - f. Why has the witness proceeded to calculate this amount and arrive at two different results (137.2 Bcf and 134.6 Bcf)? Which number is correct? How were both numbers calculated?
- DAS 7.22 A.
- a. The Storage Banking Service capacity allocation is equal to the number of "Peak days" of storage capacity allocated to all customers (28 MDCQ days) times the peak day 49,000,000 therms = 1,372,000,000 therms. (Please see the Company's response to CNE 2.01(c))
 - b. As discussed in DAS 7.21 (b) there was no specific name given to the denominator of the calculation; however, the result of this computation, based on data from Docket 04-0779, or in this proceeding, represents the total amount of storage capacity allocated based on the Commission-approved rounded number of peak days of storage.
 - c. The number included in the Company's response to CNE 2.01(c) refers to the result of the denominator in the proposed .018 factor computation in this proceeding.
 - d. The Storage Banking Service capacity represents the amount of capacity that is available to all customers, based on rounded

DAS 7.22
Page 2 of 2

number of peak days of storage, whereas the 35 Bcf of storage capacity cited by Mr. Bartlett represented a recent amount of SBS capacity which was available to Transportation customers on Rates 74, 75, 76 and 77.

- e. Yes.

- g. Both numbers are correct and used for different purposes. The 1,346,330,000 therms is the total amount of non-coincidental storage capacity which is operationally available from storage (Nicor Ex. 4.1) and is used in the SBS charge computation and the SBS entitlement calculation (number of peak days of storage). The "SBS entitlement" is rounded to the nearest whole number of "peak days" of storage (i.e. 27.5 to 28 MDCQ days) and that value (28 MDCQ days) is used to allocate storage to Transportation customers (DAS 4.03 Exhibit 4). The rounded number of peak days of storage capacity (28 days) is then multiplied by the estimated 2009 Peak Day sendout (49,000,000 therms) as shown on DAS 4.03 and that amount is used as the denominator when computing the .018 factor.

Witness: Robert R. Mudra

Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Constellation NewEnergy – Gas Division, LLC
Ill.C.C. Docket No. 08-0363
CNE Second Set of Data Requests

- CNE 2.01 Q. On page 29 of the direct testimony of Robert R. Mudra, Mr. Mudra identifies the .017 factor representing the daily proportion of peak day deliverability to cycled storage capacity from the 2004 rate case and states, based upon 2009 test year data, the factor should be updated to .018.
- a. Please provide a description of the formula that is used to determine this factor.
 - b. Please identify and describe any differences between the formula as it is used in the instant proceeding compared to how it was used per the Commission's order in Docket No. 04-0779.
 - c. Please provide the 2009 test year data and calculations that were used to derive the .018 factor.
 - d. Please provide any workpapers supporting the calculations used to derive the .018 factor.

- CNE 2.01 A.
- a. The critical day storage withdrawal limitation factor is equal to the amount of gas available from Company storage facilities on a peak day divided by the Storage Banking Service capacity allocation.
 - b. The formula is the same as used in Docket No. 04-0779.
 - c. Storage deliverability on a peak-day is 25,000,000 therms, divided by storage banking service allocation of (28 MDCQ days X 49,000,000 therms) = 1,372,000,000 therms is 0.0182 or rounded to 0.018.
 - d. No workpapers were developed or relied on for this calculation.

Witness: Robert R. Mudra

Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Illinois Industrial Energy Consumers
Ill.C.C. Docket No. 08-0363
IIEC Second Set of Data Requests

IIEC 2.02 Q. Please provide the calculation/derivation of the number of days of permissible storage service (times MDCQ) in this case, which the Company states is 28. If there are any changes in the methodology (as distinct from the input) in the calculation vis-à-vis the methodology approved by the ICC in the previous case, please explain the changes and also provide the same calculations using the previously approved methodology (if different than the one used in the current proceeding).

Corrected Response

IIEC 2.02 A. The calculation of the available number of peak days of storage capacity (MDCQ days) is computed by dividing the Storage Banking Service allocation of 1,346,333 therms by the total amount of peak-day therms of 49,000,000. This results in 27.5 which was rounded to 28.

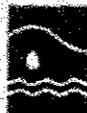
Witness: Robert R. Mudra

FINAL
NICOR Operated Gas Storage Fields
Estimate of Top/Base
And
Recoverable/Non-Recoverable Gas Volumes

Prepared for
Nicor Gas, Inc.

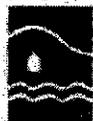
October 25, 2004

Prepared by



Fairchild and Wells, Inc.

PETROLEUM AND ENVIRONMENTAL CONSULTANTS



Fairchild and Wells, Inc.
PETROLEUM AND ENVIRONMENTAL CONSULTANTS

October 25, 2004

Mr. John W. McCaffrey
Foley & Lardner LLP
321 North Clark Street
Suite 2800
Chicago, Illinois 60610

**Re: Estimate of Top/Base and Recoverable/Non-Recoverable Gas Volumes
NICOR Operated Gas Storage Fields**

Dear Mr. McCaffrey:

SUMMARY

This letter report summarizes my estimates of the top/base and recoverable/non-recoverable gas volumes for the eight Nicor Gas, Inc. (NICOR) operated storage fields. The techniques I applied in making these gas volume estimates are generally accepted reservoir engineering methods for evaluating or for making reserve estimates of a water-drive gas reservoir. The aquifer storage system is analogous to the water drive gas reservoir. The different calculations used and how they apply to this study are discussed below.

My gas volume estimates for each field (reservoir) are presented below along with the maximum gas inventory as achieved by NICOR.

Table 1

STORED GAS VOLUMES Nicor Gas, Inc.							
Field	Maximum Inventory mmscf	Date Achieved mmscf	Top Gas mmscf	Base Gas mmsd	Recoverable Base Gas mmsd	1995 Study Non-Recoverable Base Gas % Maximum Inventory	Non-Recoverable Base Gas mmscf
Ancona	172,826	10/26/03	60,900	111,926	36,418	43.69	75,508
Hudson	46,854	11/29/01	10,250	36,604	8,328	60.35	28,276
Lake Bloomington	49,538	11/19/01	8,400	41,138	4,396	74.17	36,742
Lexington	52,185	11/12/01	8,250	43,935	5,130	74.36	38,805
Pecatonica	3,286	12/5/98	1,720	1,566	421	34.85	1,145
Pontiac - Galesville	18,737	12/13/01	8,500	10,237	3,377	36.61	6,860
Pontiac - Mt. Simon	42,864	12/16/01	3,720	39,144	6,439	76.30	32,705
Troy Grove	79,976	11/26/01	48,000	31,976	9,199	28.48	22,777
TOTAL	466,266		149,740	316,526	73,708		242,818

Mr. John W. McCaffrey
October 25, 2004

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The reservoir engineering methods applied in the study are discussed in the sections which follow. The data used in the study included historical **pressure/production** data for each storage project, NICOR **geological/engineering** review reports and the knowledge gained from working with NICOR on these storage projects over the last twenty years.

In 1995, we performed a similar study of the NICOR storage fields (Reference letter to Mr. Gary Jones dated February 24, 1995). Since this study, NICOR increased the maximum inventory (in total) by approximately 13,800 **mmscf** or about 3.1 percent. With the exception of Pecatonica, maximum inventory was increased in all other fields.

For the purpose of this study, the **top gas**¹ is the volume of gas in the reservoir above the design level of base gas. It may or may not be completely withdrawn during any particular storage season. The **base gas**¹ is the volume of gas required in a storage reservoir to provide the volume and pressure to cycle the normal top gas volume. **Recoverable gas**² is the gas considered recoverable assuming the storage reservoir is placed on production and depleted to abandonment. The difference between the total volume (top plus base) in storage and total recoverable gas in storage is the **non-recoverable gas**. The non-recoverable gas is essential to the storage operation.

ENGINEERING ANALYSIS

Top Gas/ Base Gas

Two different methods of extrapolating actual field performance data were generally used to estimate the **top/base gas** for each storage project; (1) gas withdrawal rate versus cumulative gas produced (Gp), and (2) calculated reservoir performance **coefficients** (C-factors) versus percent of inventory out. The calculated C-factors are based on reservoir pressure, flowing wellhead pressure and withdrawal rate. In both cases, the cumulative gas produced and the percent of inventory out were based on actual annual withdrawal cycle gas volumes. This analysis considered the 2000-01, 2001-02, 2002-03 and 2003-04 withdrawal cycles.

Rate vs. Gp (Storage Gas Withdrawn)

The projection of gas rate versus cumulative gas produced is an accepted method for determining the maximum produced volume under a constant set of producing constraints. This is one method used in this study to determine the top gas volume. There is, however, a judgment factor required in making this extrapolation. For example, is the rate decline a direct result of declining reservoir pressure, or are other factors involved as water production or expected future water production? Both of these are the case for the NICOR aquifer storage projects.

¹ *Survey of Underground Gas Storage Facilities in the United States and Canada*, American Gas Association, 1993.

² *The Underground Storage of Gas in the United States and Canada*, American Gas Association, 1978.

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Figures 1 through 8 show the Withdrawal Rate versus Gp for the 2000-01 through 2003-04 withdrawals for each storage project. As will be noted, the extrapolations for the south fields, Hudson, Lake Bloomington, Lexington and Pontiac Mt. Simon are straight forward since there is a dramatic decline in rate generally caused by water production. For **Ancona**, Pontiac Galesville and Troy Grove, where high deliverabilities are achievable throughout the withdrawal season, it is more difficult to make this extrapolation. The rate extrapolation for Pecatonica also required a degree of interpretation. My extrapolations for each project are shown on Figures 1 through 8.

In some cases, different withdrawal cycles will extrapolate to a different Gp since the decline in the historical rate is a function of the withdrawal schedule early in the cycle and the injection from the previous cycle. These differences are obvious when reviewing the withdrawal rate versus Gp figures.

Performance Coefficients vs. Percent of Inventory Out

The second method was to extrapolate the Performance Coefficients versus Percent of Inventory Out plots provided on select fields by NICOR. These charts, Figures 9 through 13, are based on actual field performance data and reflect the flowing pressure constraints, the number of wells on line on any given day, reservoir pressure and water production. My extrapolations are shown on each figure. These extrapolations to a top gas volume are consistent with top gas volumes as determined from the rate versus Gp extrapolations.

Water Production vs. Cumulative Gas Produced

Figures 14 through 16 show the produced water for the 2000 – 2004 withdrawal cycles as barrels water produced per day per mmscf of gas produced for Hudson, Lake Bloomington and Lexington. For all three fields, the produced water increases as the cumulative gas produced in a cycle increases. This is consistent with the decrease in the C-factors.

The estimated top gas for **Ancona**, Hudson, Lake Bloomington, Lexington, Pecatonica, Pontiac Galesville, Pontiac Mt. Simon and Troy Grove was determined to be 60900, 10250, 8400, 8250, 1720, 8500, 3720 and 48000 mmscf, respectively, based on the empirical relationships of Rate vs. Gp and/or C-Factor vs. Percent Inventory Out methods.

Non-Recoverable Base Gas

The non-recoverable (total base gas minus recoverable base gas) base gas was estimated in the 1995 study by use of the P/z versus Gp function and gas-water material balance calculations coupled with analytical water influx/efflux calculations. It was assumed that the withdrawal pressure constraints as used in storage operations would no longer be the limiting factors since the reservoir is being produced to abandonment.

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P/z versus G_p

One of the most common methods for predicting gas reserves is to graphically solve the gas material balance equation. This technique involves plotting the **P/z** versus cumulative gas produced, **G_p**. For a volumetric reservoir the **P/z** is linear and the extrapolation to zero **P/z** represents the original gas-in-place and gas reserves are generally determined by making an independent determination of the reservoir abandonment pressure. In the conventional case, the gas-in-place is **an** unknown, therefore, this method is proven to be valuable to support volumetric calculations based on structure, net sand, gas saturation and porosity maps. In aquifer storage, however, we believe we know the gas-in-place at any point in time since the net gas in the reservoir is a metered volume. Therefore, the deviation **from** the volumetric straight line is the influence of the aquifer system or water **efflux/influx** as gas is either injected or withdrawn. The significance of the water-drive is directly related to the deviation **from** the volumetric line. The Reservoir Pressure vs. Cumulative Gas Produced relationships for each NICOR field are attached as Figures 17 through 24. It is also common to use reservoir pressure in place of **P/z** in developing an empirical relationship.

These figures also compare the reservoir pressure vs. cumulative gas produced **from** the 1995 study. The comparison is good for most fields. Where there are differences it not believed this difference will change the estimated non-recoverable gas when expressed as a percent of the maximum inventory.

Material Balance and Water Influx

In the 1995 study, material balance studies of each field employing the following equation were used to quantify water influx.

$$G_{pn}B_{gn} = G(B_{gn} - B_{gi}) + B_w(W_{en} - W_{pn})$$

where:	B_g	=	(TP _{sc} Z) / (5.61 5T _{sc} P), rb/scf
	B_w	=	water formation volume factor, rb/stb
	G	=	original gas-in-place, scf
	W_e	=	cumulative water influx, stb
	W_p	=	cumulative water produced, stb
	G_p	=	cumulative gas produced, scf

To calculate water influx, **W_e**, we have used the method of **Carter-Tracy**³. This technique is an accepted method and is used in most reservoir simulators.

We have demonstrated that these procedures can be successfully applied to the analysis of gas storage in underground aquifers through numerous studies. In the normal reservoir analysis, the

³ *An Improved Method for Calculating Water Influx*, SPE AIME Transactions Vol. 219, pp 415-417, T.N 2072, 1960.

Mr. John W. McCaffrey
October 25, 2004

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gas-water material balance equation represents one equation with two unknowns, gas-in-place and water influx. Our task, for the aquifer storage studies reduces, however, to the determination of water **influx/efflux** (W_e) since the gas-in-place at any point in time is known. Therefore, the W_e is the volume required to support the historical measured pressure profile for a given storage field.

The material balance and water influx technique was used for each reservoir, except for Pecatonica, with good success. We have utilized a non-linear regression procedure to determine the "best-fit" aquifer parameters to achieve a good match of the calculated and observed reservoir pressures since the start of gas storage. The material balance models were then used to project reservoir pressure under a **blowdown** operation. From these material balance calculations, we have a reasonable estimate of the volume and rate of water movement in the various NICOR fields as a function of time and storage activity.

It was determined that a reasonable estimate of the non-recoverable gas would be where the calculated Plz versus Gp "flattened" or where the water influx was maintaining pressure for the specified gas withdrawal rates. Since pressure is no longer decreasing, there would be no additional gas recovery from gas expansion. Based on our experience, this is also the time in the life of a reservoir where the major portion of reserves have been produced.

From this technique of using Plz versus Gp and the material balance calculations, it was determined that the estimated non-recoverable gas volumes for Ancona, Hudson, Lake **Bloomington**, Lexington, Pontiac Galesville, Pontiac Mt. Simon and Troy Grove are represented by 43.69, 60.35, 74.17, 74.36, 34.85, 36.61, 76.30 and 78.48 percent, respectively, of the maximum inventory. The non-recoverable gas volume for Pecatonica was based on a recovery factor of 65%. This recovery factor is consistent with the recovery factors for the other storage fields based on the historical performance of the various reservoirs.

As noted above, the current pressure volume performance of each reservoir has not changed significantly. Since the early 1990's there have been only minor changes in the operations of the fields. These changes, including the small percentage change in maximum inventory, would not materially change the estimate of non-recoverable base gas as determined in the 1995 study.

Recoverable Base Gas

The recoverable base gas was determined as the maximum inventory minus the top gas and non-recoverable base gas. These estimated volumes are shown in the summary Table 1.

The gas volumes included in this report are estimates only and should not be construed as being exact quantities. Future operations could have an impact on these estimated volumes. In the preparation of this report and the conclusion derived **from** the studies, certain assumptions were made which may occur in the future regarding operations. Although we believe these assumptions are reasonable for the purpose of this report, changes occurring or becoming known after the date of the report could **affect** the material presented herein.

Mr. John W. McCaffrey
October 25, 2004

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Should you require additional information, or have questions regarding the methodology as used in the study, please give me a call.

Sincerely,

James W. Fairchild

James W. Fairchild
President

cc: Neil Maloney w/attachment ✓

JWF:jrb
Attachments (Figures 1-24)

Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Illinois Commerce Commission
Ill.C.C. Docket No. 08-0363
DAS Seventh Set of Data Requests

-
- DAS 7.18 Q. With regard to Nicor Gas Ex. 29.0, p. 37, lines 795-799, Mr. Mudra states that Nicor Gas knows that the 149.7 Bcf is not "operationally available."
- a. Does Nicor Gas believe that the current charge too low and is not just and reasonable?
 - b. Does Nicor Gas believe that the current SBS allocation is too high and is not just and reasonable?
 - c. Was the 149.7 Bcf operationally available in the last rate case?
 - d. What has changed since 2004 that would cause the Commission to reconsider a matter that they already determined?
- DAS 7.18 A.
- a. Yes. The current charge is \$.0029 per therm of capacity and the proposed charge is \$.0042 per therm of capacity.
 - b. Yes. The 149.7 Bcf of capacity established in 04-0779 is unachievable and 134.6 Bcf of storage capacity is available.
 - c. No.
 - d. The Commission should recognize, that since Nicor Gas' last rate case the total maximum non-coincident level of working gas in storage for the years 2005 through 2007 was 138.9 Bcf, 135.0 Bcf and 134.1 Bcf respectively as supported by Nicor Gas' response to CNE 2.22 and summarized by witness Fabrizious (CNE-Gas Exhibit 1.0 p. 12). Furthermore, the Commission should also recognize that these totals are roughly equivalent to the 134.6 Bcf level of non-coincident capacity which Nicor Gas witness Mr. Bartlett has indicated is operationally available. The Commission should therefore recognize that there is a difference between the historic maximum non-coincidental storage capacity of 149.7 Bcf which Mr. Bartlett has stated is "simply not achievable" (DAS 6.09) and is not "realistically achievable" (DAS 3.06 a) and the Company's realistically forecasted amount of non-coincidental storage capacity of 134.6 Bcf which is operationally available and is supported by actual storage capacity utilization since 2005. The Company believes the Commission should treat both Sales and Transportation customers equally and not harm Sales customers by over-allocating storage capacity to Transportation customers by allocating based on a 149.7 Bcf level which is unrealistic, unachievable and has not in fact actually occurred since the last rate case.

Witness: Robert R. Mudra

Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Illinois Commerce Commission
I.C.C. Decree No. 08-0363
DAS Fifth Set of Data Requests

Volumes in MMBtu

2001 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/5/2001	63,056,065
Hudson	11/29/2001	12,187,316
Lake Bloomington	11/19/2001	9,007,751
Lexington	11/12/2001	9,012,081
Pecatonica	9/1/2001	1,113,521
Pontiac Mt Simon	12/16/2001	5,722,193
Pontiac Galesville	12/13/2001	8,608,047
Troy Grove	11/26/2001	47,560,488
		195,267,463

2000 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/6/2000	60,437,407
Hudson	11/15/2000	10,693,423
Lake Bloomington	11/14/2000	8,067,518
Lexington	11/13/2000	7,895,006
Pecatonica	1/17/2000	975,459
Pontiac Mt Simon	11/7/2000	4,893,455
Pontiac Galesville	11/6/2000	8,367,598
Troy Grove	11/2/2000	45,644,469
		148,971,123

1999 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/13/1999	58,349,798
Hudson	11/18/1999	11,612,663
Lake Bloomington	11/18/1999	8,350,225
Lexington	11/21/1999	7,846,057
Pecatonica	2/15/1999	1,205,274
Pontiac Mt Simon	11/22/1999	5,264,104
Pontiac Galesville	7/31/1999	28,940,037
Troy Grove	11/12/1999	43,088,359
		184,859,371

1998 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/30/1998	58,856,151
Hudson	11/16/1998	11,227,110
Lake Bloomington	11/19/1998	8,397,419
Lexington	12/5/1998	7,252,911
Pecatonica	12/5/1998	1,375,819
Pontiac Mt Simon	12/6/1998	5,501,002
Pontiac Galesville	12/6/1998	8,197,963
Troy Grove	10/27/1998	42,946,087
		143,796,462

2002 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/30/2002	62,653,023
Hudson	11/14/2002	11,112,345
Lake Bloomington	11/14/2002	8,731,570
Lexington	11/18/2002	8,152,810
Pecatonica	11/22/2002	1,173,306
Pontiac Mt Simon	11/21/2002	5,288,041
Pontiac Galesville	11/24/2002	8,238,441
Troy Grove	10/22/2002	47,159,026
		143,596,462

2005 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/31/2005	59,085,060
Hudson	11/29/2005	9,136,017
Lake Bloomington	11/18/2005	7,617,144
Lexington	11/28/2005	6,650,810
Pecatonica	1/12/2005	1,521,079
Pontiac Mt Simon	11/30/2005	3,781,319
Pontiac Galesville	11/23/2005	7,454,518
Troy Grove	11/6/2005	43,515,526
		139,961,473

2004 - On-System by Field (1)

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/25/2004	58,403,490
Hudson	1/1/2004	8,975,269
Lake Bloomington	11/29/2004	7,894,067
Lexington	11/22/2004	7,274,479
Pecatonica	12/18/2004	1,482,923
Pontiac Mt Simon	1/1/2004	3,569,186
Pontiac Galesville	11/10/2004	7,812,625
Troy Grove	10/30/2004	45,684,743
		140,830,782

2003 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/28/2003	62,945,125
Hudson	11/30/2003	11,200,057
Lake Bloomington	11/30/2003	8,534,352
Lexington	11/22/2003	7,847,378
Pecatonica	1/12/2003	1,173,307
Pontiac Mt Simon	11/23/2003	5,113,335
Pontiac Galesville	11/5/2003	8,044,677
Troy Grove	10/31/2003	47,549,778
		143,408,202

2006 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/31/2006	56,819,628
Hudson	11/12/2006	8,393,645
Lake Bloomington	11/14/2006	7,863,892
Lexington	11/12/2006	7,079,473
Pecatonica	1/12/2006	1,341,333
Pontiac Mt Simon	11/13/2006	3,533,336
Pontiac Galesville	10/31/2006	7,970,447
Troy Grove	10/31/2006	42,200,658
		135,062,412

2008 - On-System by Field (2)

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	1/1/2008	38,325,132
Hudson	1/1/2008	5,181,542
Lake Bloomington	1/1/2008	4,544,654
Lexington	1/1/2008	4,577,909
Pecatonica	1/7/2008	1,368,936
Pontiac Mt Simon	1/1/2008	1,972,087
Pontiac Galesville	1/1/2008	6,662,916
Troy Grove	8/31/2008	27,495,961
		95,126,237

2008 - On-System by Field (2)

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	1/1/2008	38,325,132
Hudson	1/1/2008	5,181,542
Lake Bloomington	1/1/2008	4,544,654
Lexington	1/1/2008	4,577,909
Pecatonica	1/7/2008	1,368,936
Pontiac Mt Simon	1/1/2008	1,972,087
Pontiac Galesville	1/1/2008	6,662,916
Troy Grove	8/31/2008	27,495,961
		95,126,237

2007 - On-System by Field

Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/1/2007	57,049,377
Hudson	11/12/2007	8,568,634
Lake Bloomington	11/12/2007	7,730,614
Lexington	11/12/2007	6,985,443
Pecatonica	11/13/2007	1,372,140
Pontiac Mt Simon	12/10/2007	2,776,801
Pontiac Galesville	10/19/2007	8,159,694
Troy Grove	10/31/2007	41,533,335
		124,162,838

2007 - On-System and Leased Storage

Year	Date	Volume (MMBtu)
2001	11/24/2001	152,250,715
2002	10/30/2002	152,970,202
2003	11/2/2003	182,269,140
2004	10/31/2004	171,265,470
2005	11/6/2005	170,931,775
2006	10/31/2006	166,708,738
2007	11/4/2007	163,967,610
2008 (2)	1/1/2008	115,315,483
		140,594,351
		136,159,201
		132,052,970
		131,571,019
2008 (2)		90,126,891

Leased Storage

Year	Date	Volume (MMBtu)
2001	9/20/2001	8,037,538
2002	10/21/2002	7,944,613
2003	10/31/2003	38,817,504
2004	10/31/2004	39,307,054
2005	11/5/2005	36,516,514
2006	10/31/2006	35,252,772
2007	10/30/2007	33,748,027
2008 (2)	8/31/2008	25,684,603

Total - Non-Compliant On-System Storage

Year	Date	Volume (MMBtu)
1998		143,796,462
1999		184,859,371
2000		148,971,123
2001		195,267,463
2002		143,596,462
2003		143,408,202
2004		140,830,782
2005		139,961,473
2006		135,062,412
2007		124,162,838
2008 (2)		90,126,237

Total - On-System and Leased Storage

Year	Date	Volume (MMBtu)
2001	11/24/2001	152,250,715
2002	10/30/2002	152,970,202
2003	11/2/2003	182,269,140
2004	10/31/2004	171,265,470
2005	11/6/2005	170,931,775
2006	10/31/2006	166,708,738
2007	11/4/2007	163,967,610
2008 (2)	1/1/2008	115,315,483

Total - On-System Storage

Year	Date	Volume (MMBtu)
1998	12/6/1998	139,214,187
1999	11/13/1999	142,046,331
2000	11/7/2000	143,753,201
2001	11/24/2001	150,891,659
2002	10/30/2002	145,174,482
2003	11/4/2003	144,050,156
2004	10/31/2004	131,956,416
2005	11/6/2005	132,469,032
2006	11/9/2006	131,851,462
2007	11/4/2007	130,392,564
2008 (2)	1/1/2008	90,126,891

On-System %

Year	Date	Volume (MMBtu)	On-System %
2001	11/24/2001	164,305,020	95%
2002	10/30/2002	160,453,175	95%
2003	11/2/2003	181,225,211	80%
2004	10/31/2004	180,137,636	76%
2005	11/6/2005	177,439,987	76%
2006	10/31/2006	176,924,184	75%
2007	11/4/2007	167,924,265	80%
2008 (2)	1/1/2008	115,315,483	76%

Total - On-System and Leased Storage

Year	Date	Volume (MMBtu)
2001	11/24/2001	152,250,715
2002	10/30/2002	152,970,202
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Total - On-System Storage

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2007	11/4/2007	163,967,610
2008 (2)	1/1/2008	115,315,483

Total - On-System and Leased Storage

Year	Date	Volume (MMBtu)
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Northern Illinois Gas Company d/b/a Nicor Gas Company
Response to: Illinois Commerce Commission
Ill.C.C. Docket No. 08-0363
ENG Third Set of Data Requests

ENG 1.26 Q. How is the 2% storage withdrawal adjustment factor applied to a) sales customers, b) transportation customers, c) the Hub, and d) any other user of Company owned storage? Fully explain the methodology and the Company's rationale for the application of the 2% adjustment factor to each group a) through d) described above. Provide examples showing on a monthly basis how each group would be assigned the 2% storage withdrawal adjustment factor.

ENG 1.26 A. The 2% storage withdrawal factor is applied (i.e. allocated) to sales customers based on their share of net withdrawal activity in company owned storage fields in each month. That percentage share is then multiplied by the total volume of the 2% storage withdrawal factor (calculated as explained in ENG 1.25). The remaining volume of the 2% storage withdrawal factor is allocated to the transportation customers and is recovered in-kind through their lost-and-unaccounted for adjustment. The 2% storage withdrawal factor is not applied to Hub volumes because Hub volumes are not directly subject to the unaccounted-for adjustment until the gas is delivered to an end-use customer's account. At that time, the end-use customer is assessed the unaccounted-for adjustment, which includes a portion of the 2% withdrawal factor. There are no other users of Company owned storage fields.

The Company computes the allocation of the 2% storage withdrawal factor on the basis of net withdrawal activity because, as explained in the Company's response to ENG 1.22, total/gross injection and withdrawal activity is not available for transportation customers. Their activity is calculated as the difference between their beginning and ending storage balances for the period. Furthermore, because Sales injection/withdrawal activity is calculated as the difference between total aquifer activity and the activity of all other endusers (which is only available on a net basis), the Sales customer's activity is only available on a net basis. This methodology was presented and accepted in the company's last rate order, Docket No. 04-0779. Please see attached Exhibit 1 for an example of how the 2% storage withdrawal factor is calculated and how it is allocated between sales and transportation.

Witness: James M. Gorenz

Northern Illinois Gas Company db/a Nicor Gas Company
 Response to: Illinois Commerce Commission
 Ill.C.C. Docket No. 08-0363
 ENG Third Set of Data Requests

Example - Storage Gas Losses
 December 2007

Storage Field	(a) Gross Withdrawals	(b) Storage Gas Loss	X 2%	(c) - (d) = (e) Net Aquifer Withdrawal	(d) Aquifer Injection	(e) - (f) - (g) = (h) Sales Net Withdrawal	(f) Transportation Net Withdrawal	(g) Hub Withdrawal	(h) / (e) = (i) Sales Allocation	(i) * (b) = (j) Sales Portion of Storage Loss	(b) - (j) = (k) Transportation Portion of Storage Loss
Arcona	10,560,312	211,206	2%								
Hudson	2,192,970	43,860	2%								
Lake Bloomington	2,065,359	41,304	2%								
Lexington	1,707,324	34,143	2%								
Pecatonica	-	-	2%								
Pontiac Mt. Simon	747,300	14,946	2%								
Pontiac Galesville	1,023,571	20,471	2%								
Troy Grove	7,665,480	153,310	2%								
	<u>25,962,316</u>	<u>519,241</u>		26,016,947	464,610	17,832,222	6,345,204	1,839,521	68.54%	355,892	163,349

Notes:

- (f) Transportation Net Withdrawal is calculated as the difference between the beginning and ending balances of their storage accounts. Includes Transportation and Customer Select customers.
- (g) Hub volumes are not directly subject to the Unaccounted-For adjustment until the gas is delivered to an end-use customers' account.
- (h) Calculated as the difference between net aquifer withdrawals and withdrawals of others (Transportation and Hub).
- (k) Collected in-kind through the lost-and-unaccounted-for adjustment.

