IIEC Exhibit 1.0

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

NORTHERN ILLINOIS GAS COMPANY D/B/A NICOR GAS COMPANY	)	
	)	**DOCKET NO. 08-0363**
PROPOSED GENERAL INCREASE IN NATURAL GAS RATES	)	

Direct Testimony and Exhibits of

Dr. Alan Rosenberg

On Behalf of

Illinois Industrial Energy Consumers

August 27, 2008
Project 8996

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

STATE OF ILLINOIS

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Direct Testimony of Alan Rosenberg

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A My name is Dr. Alan Rosenberg. My business address is 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a managing principal with Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This is summarized in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf of the Illinois Industrial Energy Consumers (IIEC). The members of IIEC are large industrial customers who transport natural gas on the Nicor Gas (Nicor or Company) system.

Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

A I will address four subjects. The first is Nicor's embedded cost of service study (ECOSS). The second will address the proper allocation of the base revenue increase. The third will address the specifics of the proposed Storage Banking Service ("SBS") charge. The fourth and final section will address the Company's proposed changes to the storage withdrawal rights of transportation customers.

Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A On the issue of the ECOSS, I agree with the Company that a coincident peak allocation method would better reflect the link between customer behavior and the costs that this behavior imposes on Nicor. However, I also agree with the Company that the Average & Peak classification method is currently the method sanctioned by the Illinois Commerce Commission (Commission or ICC) and that it would be fruitless to challenge that position unless and until the Commission signals that it is amenable to reconsider that topic. Nevertheless, while still using the Average & Peak method, I find that it is possible to improve the accuracy of the cost of service study by extending the use of the Modified Distribution Mains ("MDM") engineering study, which the Commission has also accepted.

On the issue of revenue allocation, I find that the Company has neglected the indications of its own ECOSS. Rather, because Rate 1 was subsidized in the last case, the Company wants to extend that inequity. The result is an inordinately large and unjustified increase to Rate 76 and Rate 77. I show the impact of remediating that problem based on the Company ECOSS, as well as the modified and more appropriate ECOSS that I support in the first section of this testimony.

On the issue of the SBS charge, I question the legitimacy of the proposed 76 percent increase in this charge and suggest a lower charge.

Finally, I recommend that the Commission reject the Company's proposals to further restrict the ability of transportation customers to inject gas into their storage banks. I also suggest a modest change in the definition of the Storage Withdrawal Factor (SWF).

Cost of Service Study

Q PLEASE BRIEFLY DESCRIBE THE THREE FUNDAMENTAL STEPS IN CONDUCTING A CLASS COST OF SERVICE STUDY.

A The three basic steps are Functionalization, Classification, and Allocation. The first step, Functionalization, divides the rate base and operating expenses (including depreciation) in accordance with the function that they serve. The chief functional areas in a gas cost of service study are Supply, Transmission, Storage, Distribution Mains, Services, Metering and Customer Accounting. This step is guided by the uniform system of accounts and is normally non-controversial, although there is some analysis required to distribute joint overhead among the principal functions.

The second step, Classification, divides the functionalized plant or expense into three major categories, which are typically Annual Throughput (or Volume), Demand, and Customer. This is done by examining which service characteristic is deemed to be most directly responsible for the incurrence of the cost. Purchased gas costs, for example, are clearly related to volume. Demand costs are those that are not influenced by annual usage, but rather are more or less responsive to the peak demands of the customers. Normally, any piece of equipment that must be sized to a

certain capacity (therms per day or therms per hour) is therefore considered demand related. Customer-related costs are those that are insensitive to either annual usage or peak demands, but instead respond to the number of customers on the system.

The third step, Allocation, concerns itself with the appropriate measure of usage, demand or customer, as the case may be, to allocate the functionalized and classified element of cost among the various rate schedules. For example, if an element of cost is demand related, but certain classes of customers do not make use of that particular cost element, the demand allocator must be calculated so as to reflect that fact. That is, the demand of these customers must be excluded from the calculation of the allocator. Another example is the allocation of meters. While meters are customer related, larger customers require more expensive meters. Hence, the customer allocation factor must be weighted to reflect that fact.

Q WITH WHICH PARTICULAR STEP DO YOU TAKE ISSUE IN THE NICOR COST OF SERVICE STUDY?

A I take issue with the allocation of distribution mains. However, to explain this I must give a little background. The conventional way of *classifying* mains is partly as customer related and partly as demand related. This recognizes the fact that the system of distribution mains must be extended as new customers are added to the system, but that the diameter of the mains must be sized in accordance with the capacity that is required. (The capacity of a main [with the pressure held constant] varies exponentially with the diameter.) I have been involved in Nicor rate proceedings for 25 years, and I know that is how the Nicor engineers have always viewed the cost-causative factors for their mains. However, the ICC has not subscribed to that view. Instead of classifying mains as partly customer related and

partly demand related, for several years now the ICC has taken the position that distribution mains should be classified as partly *volume* related and partly demand related. This method of splitting the mains into a volume-related portion and a demand-related portion is known as the Average & Peak classification method. Specifically, the portion or fraction that is deemed volume related is set equal to the load factor of the system, with the balance of the distribution mains classified as demand related.

Q ARE YOU TAKING ISSUE WITH THE AVERAGE & PEAK METHOD?

A No, not in this case. While I disagree with the Average & Peak method, like Mr. Heintz, the Nicor ECOSS witness, I accept for purposes of this proceeding that this is established philosophy and until the ICC signals that it is willing to seriously entertain other methods, I see no point in arguing against this allocation method. However, the ICC has also, for the past several Nicor rate cases, accepted the MDM study for *allocating* the demand-related portion of mains. Notice that the Average & Peak method, and the MDM study are distinct and unrelated. The Average & Peak method concerns itself with the **classification** of distribution mains, while the MDM study concerns itself with the ***allocation*** of distribution mains.

Q SO IF MR. HEINTZ HAS USED THE AVERAGE & PEAK METHOD FOR PURPOSES OF CLASSIFICATION, AND HAS USED THE MDM STUDY FOR PURPOSES OF ALLOCATION, WHERE AND WHY DO YOU TAKE EXCEPTION TO THE NICOR STUDY?

A Mr. Heintz has, quite properly, used the MDM study to allocate the demand portion of distribution mains, but he has, incorrectly, ignored the MDM study when he allocated the portion of mains that is deemed volume related.

Q WHY SHOULD THE MDM STUDY BE UTILIZED IN ALLOCATING THE PORTION OF MAINS CONSIDERED VOLUME RELATED?

A The MDM study recognizes the Nicor system of mains is configured in such a way that not all customers in a class use all sizes of mains. For example, in this case, the MDM study showed that only a single Rate 77 customer used 2-inch mains. This customer represented 3.374% of the total peak day usage of Rate 77. Consequently, when allocating the 2-inch mains, Mr. Heintz modified the peak demand of Rate 77 to use only 3.374% of that class's peak demand. In contrast for example, the MDM study showed that 81.35% of the Rate 1 class's peak day demand was delivered through 2-inch mains, so that class's demand was modified by the factor 81.35% when allocating 2-inch mains. By making these distinctions for each size of main, Mr. Heintz was able to more accurately allocate the demand-related portion of distribution mains. However, that very same principle also holds true for the volume-related portion. **If all customers on Rate 77, except for one, do not use 2-inch mains on the peak day, then clearly all Rate 77 customers, but one, make no use of the 2-inch mains on any other day!** Nicor does not use one configuration of mains on the peak day, and use a different configuration on the other days.

Unfortunately, by indiscriminately using annual volumes, without distinguishing diameter sizes, on the volume-classified portion of mains, Mr. Heintz is ignoring that engineering reality. Just as the accuracy of the allocation of the demand-related portion of mains is improved by recognizing the MDM study, the accuracy of the volume-related portion of mains can be improved by recognizing the physical fact that not all diameters of mains are used in serving some customers.

Q WHY AREN'T ALL CLASSES SERVED TO THE SAME EXTENT BY THE DIFFERENT SIZES OF MAINS?

A The system of mains is akin to a system of branches of a tree; the gas flows from the largest diameter mains into successively smaller sizes. However, the largest volume customers cannot be served by the smaller diameter mains, because the small mains do not have sufficient capacity. The MDM study captures and quantifies this physical fact.

Q WERE YOU ABLE TO EXTEND THE MDM STUDY TO THE VOLUME-RELATED PORTION OF THE NICOR MAINS AS WELL?

A Yes. I applied the same volumetric percentages that the MDM study used for peak day flows, to the average day as well. In other words, since the MDM study found that only 3.374% of Rate 77's volume flowed through 2-inch mains on the peak day, it is reasonable to use the same percentage of Rate 77's average volume, as Rate 77's throughput on 2-inch mains for an average day. This is tantamount to using the load factor for each class as a whole, as a proxy for the load factor of that class's use on each diameter. Certainly, this improves the accuracy of the Company study. IIEC Exhibit 1.1 compares the Company imputed allocation of distribution mains with my

adjusted allocation. IIEC Exhibit 1.2 shows the result of the cost of service study which reflects this more accurate allocation of mains.

Q DOES IIEC EXHIBIT 1.2 REFLECT ANY OTHER CHANGE TO MR. HEINTZ'S COST OF SERVICE MODEL, OTHER THAN MAKING FULL USE OF THE MDM STUDY?

A Yes. In examining the Nicor cost of service model I found an error in Mr. Heintz's workpaper for Schedule B. Specifically, when extrapolating from the income change necessary for equal rates of return, to the revenue change required, Mr. Heintz multiplied by the factor 1.0792. However, he should have multiplied by 1.663 since Nicor needs to get $1.663 in revenue for each $1.00 in income. This error serves to understate the revenue adjustment needed to bring each class to parity. The 1.663 was calculated by taking the reciprocal of 1 minus a composite tax factor of 39.86%.

Revenue Allocation

Q NICOR WITNESS MR. MUDRA STATES THAT AMONG THE "MAJOR OBJECTIVES" OF NICOR'S RATE DESIGN IS CREATING COST-BASED RATES, AND TO PROVIDE MORE EQUITY BETWEEN THE RATE CLASSES BY REMOVING EXISTING CROSS-SUBSIDIES. DO YOU AGREE WITH THOSE OBJECTIVES?

A Yes, although I consider those as really one and the same objective. Cost-based rates are considered to be fair because then each class is paying what it costs to serve them, no more and no less. In fact, cost-based rates are probably the most universally accepted standard of proper ratemaking. Not only is it eminently the

fairest way of apportioning revenue, but it furthers the goal of revenue stability and efficiency.

Q MR. MUDRA ALSO ESPOUSES THE PRINCIPLE OF GRADUALISM. DO YOU AGREE THAT THIS IS A PROPER CONSIDERATION?

A I agree that increases indicated purely by cost of service considerations, may have to be tempered in order to avoid unduly severe rate impacts. I would note, however, that unlike the major objectives, this principle, by its very nature, is more subjective in its application.

Q DO YOU AGREE THAT NICOR'S PROPOSED RATE DESIGN COMPORTS WITH THOSE STATED OBJECTIVES AND PRINCIPLES?

A No, not nearly to the extent that it could or should do so. For example, Mr. Mudra arbitrarily limits the increase to Rate 1, not on the basis of rate impact, but simply because Rate 1 was only assigned 95% of the approved ECOSS in the last case. In other words, because cross-subsidies were allowed in the last case, Mr. Mudra presumes that it is okay to continue the cross-subsidization in this case. This makes no sense to me.

Q BUT WOULD YOU NOT AGREE THAT THIS LIMITATION TO RATE 1 IS JUSTIFIED BY THE PRINCIPLE OF GRADUALISM?

A No. If we look at the situation from the perspective of base rates only (excluding the cost of Rider 6 Gas Supply costs and Rider 12), a cost-based increase (as measured by the Company study) would necessitate an increase of only 1.35 times the system average increase for Rate 1. This is for a class on which the Company is **currently**

losing money. In contrast, for Rate 76, which is currently producing a rate of return above the system average, Nicor is proposing a base rate increase which is almost 1.5 times the system average. It is also illuminating to compare Nicor's proposal for Rate 77, for which it is proposing a 62.43% increase, or almost 2½ times the system average (or almost twice the increase accorded to Rate 1), even though **Rate 77 is shown as producing a higher return than Rate 1**.

If Nicor takes the position that an increase in base rates of 2½ times the system average is not cause for rate mitigation, then surely an increase of 1.35 times the system average is *a fortiori* not an instance for rate mitigation.

Q ASSUMING FULL RATE RELIEF, WHAT WOULD BE THE REQUISITE INCREASES TO ELIMINATE CROSS-SUBSIDIZATION AS MEASURED BY THE COMPANY COST OF SERVICE STUDY?

A The results are shown on IIEC Exhibit 1.3. I have also prepared IIEC Exhibit 1.4, which shows the requisite cost-based increases at one-half full rate relief.

Q IIEC EXHIBIT 1.3 AND IIEC EXHIBIT 1.4 ARE BASED ON THE COMPANY STUDY. HAVE YOU PREPARED SIMILAR EXHIBITS BASED ON THE MORE ACCURATE STUDY SUMMARIZED IN IIEC EXHIBIT 1.2?

A Yes. The results are shown on IIEC Exhibit 1.5 and IIEC Exhibit 1.6, which assume, respectively, full rate relief and one-half full rate relief. However, as I will explore shortly, both cost of service studies, Mr. Heintz's as well as my modified study, require subsequent adjustment in the assignment of storage costs to make them suitable for purposes of revenue allocation.

Q DOES THE COST STUDY SUMMARIZED IN IIEC EXHIBIT 1.2 INDICATE A SITUATION THAT WOULD JUSTIFY "RATE MITIGATION OR MODERATION?"

A No. In this case Nicor is seeking an increase in base rates of 26.2%. In my opinion, any increase of more than twice that amount, or 52%, would be a condition that warrants mitigation on the grounds of gradualism. Only one class, Rate 75, is in that situation. Fortunately, Rate 75 is very small so that capping an increase for that class would not necessitate any significant changes for the other classes.

Q YOU HAVE EXPLAINED HOW THE MORE ACCURATE STUDY SUMMARIZED IN IIEC EXHIBIT 1.2 CORRECTS THE NICOR FILED STUDY BECAUSE IT RECOGNIZES THE MDM STUDY FOR BOTH CATEGORIES OF MAIN COSTS, NOT JUST THE DEMAND-RELATED PIECE. ARE THERE ANY OTHER PROBLEMS WITH THE NICOR FILED STUDY?

A Yes. There is a problem with the storage-related costs allocated to Rate 74, Rate 76 and Rate 77. The problem becomes evident by comparing the storage *costs* allocated to those classes, with the storage *revenues* collected from those same classes. I have done such a comparison in the following table:

Table 1

Comparison of Storage Costs Allocated to Unbundled Transportation Classes Versus Revenues Collected by SBS Charge

Description	Rate 74	Rate 76	Rate 77
Costs Allocated in Cost of Service Study ($000)[1]	$10,793	$4,105	$3,610
Revenues Collected at Proposed Rates through the SBS Charge ($000)[2]	$9,657	$3,697	$3,133
Difference	**$1,136**	**$408**	**$477**

[1]Source: Nicor Exhibit 15.1, Schedule E, p. 1, Column F.
[2]Source: Nicor Exhibit 14.7, pp. 4-5, Column E.

As can be seen, the cost of service study allocates Rate 76 approximately $400,000 *more* in storage costs than is collected through the ***proposed*** SBS charge (not the current one). For Rate 77 the disparity is even more pronounced. The cost of service study allocates Rate 77 almost $500,000 *more* in storage costs than is collected through the ***proposed*** SBS charge.

Q WHY DOES THE ABOVE TABLE DEMONSTRATE A PROBLEM?

A The proposed SBS charge is intended to be a cost-based rate. There is no disagreement on that score. Thus, by definition, the storage costs allocated to these classes should equal the revenues derived by the SBS charge. It is a tautology that the two be equal. In other words, this issue is not a matter of opinion or philosophy. It is simply a matter of fact.

Q HOW DOES THE PROBLEM ARISE?

A The problem arises because, with regard to the storage allocation, Mr. Heintz treated Rate 74, Rate 76 and Rate 77 as no different from any other class. In other words, Mr. Heintz incorrectly assumed that storage costs are bundled in with the delivery rates for these three classes, as they are with the other classes. However, these three classes are very different. Storage service is unbundled from the delivery service. The customers on Rate 74, Rate 76 and Rate 77 are free to choose how much storage service they wish to use (and wish to pay for). Mr. Heintz ignores this reality. Consider what would happen, for example, if none of these customers opted for storage. Under that circumstance, the customers would not have any storage capability, so the storage revenues would be zero. However, the Nicor study would be oblivious to this and would continue to allocate almost $8 million in storage costs to these customers.

Q HOW CAN THIS OBVIOUS DISCREPANCY BE CORRECTED IN THE COST OF SERVICE STUDY?

A The remedy is very simple. Storage cost responsibility should be ***assigned*** to Rate 74, Rate 76 and Rate 77, instead of *allocated*. The amount assigned to these service classes should be precisely equal to the revenues recovered through the proposed cost-based storage. Then, of course, the remainder of the storage costs (after the assignment) would be allocated to the remaining service classes, just as Mr. Heintz has done.

Q HAVE YOU CORRECTED THE NICOR STUDY IN THIS REGARD?

A No, I have not.

Q WHY HAVE YOU NOT MADE THIS CORRECTION TO THE COST OF SERVICE STUDY SHOWN IN YOUR IIEC EXHIBIT 1.2?

A I have not made the correction for three reasons. First, I wanted to isolate the impact of only extending the MDM analysis to the volume-related portion of the mains. Second, it is easier to make this correction as a subsequent adjustment to the cost of service study, rather than changing the intricacies of Mr. Heintz's model. Finally, the correction depends upon the SBS charge that is approved in this case, and I disagree with the Company's calculation of the SBS charge. (This issue is the subject of the next section of my direct testimony.) However, I can say unequivocally that if the correction would be made, the rates of return for Rate 74, Rate 76 and Rate 77 would be even higher than those shown on IIEC Exhibit 1.2. I can also state that, if we assume hypothetically that the Nicor proposed SBS charge is correct, the requisite increase to Rate 76 will be $408 thousand less (see Table 1) than that indicated by either the Company cost of service study or the more accurate study summarized in IIEC Exhibit 1.2, all other things being equal. Remember, storage service is unbundled for Rate 74, Rate 76 and Rate 77. These customers can *choose* anywhere from zero storage service up to 28 days of storage service. As long as the SBS charge is predicated on cost of service – as this Commission has mandated that it be – the ECOSS must assign the same storage cost to each of these classes as the SBS revenue collects from each class, or there will be a mismatch between revenues and costs. Similarly, under those same assumptions, Table 1 shows that the requisite increase to Rate 77 will be $477 thousand less than that indicated by either the Company cost of service study or the more accurate study summarized in IIEC Exhibit 1.2, all other things being equal, again as shown on Table 1. Likewise, the increase to Rate 74 must also be adjusted.

SBS Charge

Q WHAT IS NICOR'S PROPOSAL ON THE SBS CHARGE?

A Nicor is proposing a charge of 0.51 cents per therm. This is an increase of 76% over the current rate.

Q WHY IS NICOR PROPOSING SUCH A SHARP INCREASE IN THE RATE?

A The SBS charge is calculated as the ratio of the cost of storage (excluding the carrying cost of top gas, since that is provided by the transportation customers themselves), divided by the capacity of the storage field. In this case, Nicor is proposing a cost of $83.186 million as the numerator and a denominator of 1,354,000,000 therms or 135.4 Bcf.

Q DO YOU AGREE WITH THE NUMERATOR?

A Nicor is alleging that the cost of storage is over 55% higher than the Commission found appropriate less than four years ago. The cost comparison between the last case and the current filing is depicted on the following table:

Table 2
Comparison of Claimed Storage Costs
Last Case vs. Current Case

Description	2005 Test Year	2009 Test Year	Increase
Return & Income Taxes ($000)	$20,094	$27,730	+38.8%
Operating Expenses	$33,714	$55,457	+64.5%
Total Revenue Requirement	$53,808	$83,186	+54.6%

I am skeptical that the cost of the underground storage fields could have skyrocketed that much in so short a time. I do question one particular item, described just as Other Expenses (Account 824), that Nicor claims will be $15.230 million in the test year. I would urge the Staff and other parties to closely scrutinize all the costs that Nicor is claiming as legitimate storage expenses and make Nicor explain and justify this magnitude of increase. Of course, any reduction to Nicor's claimed storage costs should also be reflected in both the revenue requirement calculation and the cost of service study as well as the SBS charge.

Q DO YOU AGREE WITH THE DENOMINATOR?

A No. In the previous case, the Commission rejected Nicor's position on the denominator and directed Nicor to use 149.74 Bcf, which is the maximum amount of working gas in storage. Nicor acknowledges that its storage fields have <u>not</u> experienced a reduction in their physical ability to store, receive or deliver gas in the last five years. (Response to Data Request IIEC 2.01). Consequently, there is no reason to change the denominator from the value that the Commission approved in the previous case. Using the denominator approved by the ICC in the previous case, instead of the denominator Nicor chose to use in this case, would reduce the charge to $.0046 per therm of storage per month.

<u>Storage Terms and Conditions</u>

Q IS THE COMPANY PROPOSING TO MAKE CHANGES TO THE TERMS AND CONDITIONS OF THE SBS?

A Yes. The Company is proposing to restrict the amount of gas that a customer can

place into storage during the months of July, August, September and October and also in the months of March and April, as compared with the present situation.

Q HAS THE COMPANY PRESENTED ANY EVIDENCE THAT THE CURRENT INJECTION PARAMETERS ARE CAUSING A PROBLEM OR HARMING THE SALES CUSTOMERS?

A No. In fact, when asked (in data request IIEC 1.09) whether the Company had any studies that purported to show the impact of transportation customers' use of SBS on the cost of purchased gas for sales customers, the Company conceded that it had not conducted or commissioned any such studies. In fact, Nicor has been able to satisfactorily operate its storage fields for the last 15 years or so without the new restrictions it is now requesting.

Q COULD THE NEW RESTRICTIONS ADD TO THE COST OF ENERGY OF THE INDUSTRIAL COMPANIES IN NICOR'S SERVICE TERRITORY?

A Potentially, yes. The primary goal of storage for transportation customers is to help optimize their energy costs. In today's era of soaring energy prices, this is not an opportune time to "pile on," especially when there are no compelling reasons to do so. Succinctly put, customers have a hard enough time coping with volatile and escalating natural gas costs. The Company should not exacerbate that problem by proposing restrictions on the use of storage that are not absolutely necessary.

Q PLEASE DESCRIBE THE LIMITATIONS THAT THE COMPANY IS PROPOSING FOR INJECTIONS FOR THE MONTHS OF JULY THROUGH OCTOBER?

A The transportation customer's ability to inject into storage is governed by the amount it can nominate on any day, its so-called Maximum Daily Nomination (MDN). This is because the positive difference between the MDN less the amount of gas the customer actually consumes, is placed into storage. (I ignore losses here.) Currently, the MDN is calculated for each month April through October by adding (1) the customer's historic monthly usage for the month and (2) 25% of the customer's SBS capacity, with the resulting volume converted to a daily rate by dividing it by the number of days in the month. The idea is that if the customer nominated its MDN for every day of the month it could fill one-quarter of its capacity for the month. However, the Company is proposing to change the second part of this formula for the months July through October. Instead of using 25% of the customer's SBS capacity, it is proposing to use 25% of the difference between the customer's SBS capacity and the customer's actual inventory balance at the end of April.

Q WHAT IS THE OSTENSIBLE RATIONALE FOR THIS CHANGE?

A Nicor witness Mr. Barrett believes that a customer's daily injection rights should be inversely proportional to the level of its capacity on April 30.

Q WHAT IS WRONG WITH MR. BARRETT'S LOGIC?

A First, Mr. Barrett has not shown why this new restriction is necessary. He does say that the proposed change is expected to help reduce the potential need for Nicor to cap pipeline deliveries for those days during the season when too much gas is being nominated. However, he has provided no evidence that this new restriction will have

that effect. Second, a transportation customer will more than likely reduce nominations of its own accord as its storage bank is filled. Moreover, this new proposal will make it more difficult for customers to fill their storage banks to their total capacity, an objective that Mr. Barrett encouraged in the last case. For instance, assume that a customer has its storage bank 50% full on April 30, but only has its storage bank 75% full on October 1. The new restriction will make it impossible for that customer to reach the 90% target by November 1.[1] That is because a customer in that situation would only be able to fill its storage capacity to 87.5% of capacity, calculated as 0.50 + .25 x (.75 - .50). Thus, the Company's proposal to change the MDN formula for July through October should be rejected.

Q PLEASE DESCRIBE THE COMPANY'S PROPOSAL TO LIMIT NOMINATIONS IN MARCH AND APRIL.

A Currently, transportation customers can nominate up to two times their MDQ in March. The Company is proposing that the March nomination now be limited to 1½ times the customer's historical usage calculated on a daily basis. In April, the current limit is the historical usage plus 25% of its SBS capacity. The Company is now proposing to reduce the current limit to 110% of the customer's historical usage.

[1] According to current tariff terms and conditions, transportation customers must fill their storage balances to within at least 90% of their subscribed capacity, or suffer the consequences.

Q HAS MR. BARRETT PROVIDED ANY STUDIES OR OTHER ANALYTICAL SUPPORT TO JUSTIFY THE 1½ TIMES PARAMETER OR THE 110% PARAMETER, AS OPPOSED TO SOME OTHER FIGURE?

A No. Nor has Mr. Barrett shown why these new limitations are necessary. He does note that, theoretically, customers as a group could inject significantly more than 1 BCF per day into their storage accounts. However, according to the Company response to data request IIEC 1.11, I calculate that since 2003, the transportation customers have injected less than 6 BCF in the entire month of March, or an average of less than 2/10ths of 1 BCF in March and far less than that in April.

Q MR. BARRETT NOTES THAT THE COMPANY NEEDS TO BE ON WITHDRAWAL IN MARCH, AND CLAIMS THAT THIS PROPOSAL IS NECESSARY TO AVOID A DEGRADATION OF THE INTEGRITY OF THE FIELDS. PLEASE RESPOND.

A It is true that the Company may need to make withdrawals in March, and even into April. However, the Company has done so in the past, and will continue to do so, even under the current nomination parameters by transportation customers. The transportation customers' nominations do not dictate how Nicor chooses to operate its fields, as Nicor can control that through its own nominating practices and algorithms. Mr. Barrett made similar dire warnings in the last case when proposing new restrictions on Maximum Daily Nominations.

Q WHAT DID THE COMMISSION FIND IN THE LAST CASE?

A The Commission found as follows:

> Currently, Transportation customers can nominate up to two times their MDCQ. Nicor proposes to reduce that to one times the

customer's MDCQ during the winter season. Staff supports Nicor's proposal while IIEC, CNE, Vanguard and RGS oppose it.

The Commission rejects Nicor's proposed change. To the extent possible, the Commission would prefer to increase rather than reduce the flexibility of customers, whether Transportation customers or Customer Select customers. Nicor has been operating under the existing maximum daily nomination for many years. While the Commission can understand Nicor's argument that storage injections in winter are inconsistent with Nicor's objectives to fully cycle its storage fields, winter injections also seem fully consistent with Nicor's objective of maintaining sufficient gas in storage to meet late winter demands for significant storage withdrawals.

The record contains no analysis that demonstrates Transportation customers intentionally interfere with Nicor's efforts to cycle its storage fields or that the activities of Transportation customers have ever actually interfered with Nicor's efforts to cycle its storage fields. In the absence of additional empirical evidence or a more compelling argument, the Commission has no choice but to reject Nicor's proposed change.

Q WHAT IS YOUR RECOMMENDATION IN THIS CASE?

A I recommend that the Commission reject the proposed limitations on daily nominations and retain the status quo.

Q DO YOU HAVE ANY RECOMMENDATIONS ON THE CURRENT WITHDRAWAL LIMITATIONS OF TRANSPORTATION CUSTOMERS?

A Yes. In the last case, the Commission approved the creation of a Storage Withdrawal Factor or SWF. The purpose of the SWF is to reduce the customer's ability to withdraw from storage to the extent that it has not filled its storage capacity. The SWF is a multiplicative adjustment to the customer's otherwise withdrawal limitation. The SWF is defined as the customer's [November 1 Inventory Balance] divided by [90% of its SBS capacity].

Q HOW WOULD YOU PROPOSE THAT BE MODIFIED?

A I accept the concept and the objective of the SWF. However, I find that the November 1 date is somewhat arbitrary. While November 1 is notionally the date that Nicor attempts to hit its maximum inventory, I believe that the customers should have a little bit of latitude. Even Nicor does not always reach its maximum working gas inventory exactly on November 1. Thus, I propose replacing the customer's "November 1 Inventory Balance" with the customer's *Maximum Inventory Balance between October 15 and November 15*. This is in accord with the Commission's expressed opinion to provide transportation customers with increased flexibility, yet it does not compromise the basic objective of the SWF.

Q DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Alan Rosenberg

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Alan Rosenberg. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and am a managing principal with the firm of Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I was awarded a Bachelor of Science Degree from the City College of New York in 1964 and a Doctorate of Philosophy in Mathematics from Brown University in 1969. Subsequently, I held an Assistant Professorship of Mathematics at Wesleyan University in Connecticut. In the summer of 1975, I was a Visiting Fellow at Yale University. From July, 1975 through January, 1981, I was Assistant Controller and Project Manager for a division of National Steel Products Company. My responsibilities there included supervision of management accounting, cost accounting and data processing functions. I was also responsible for internal control, general ledger systems, working capital levels, budget preparation, cash flow forecasts and capital expenditure analysis.

I have published in major academic journals and am a member of the International Association for Energy Economics. I was an invited speaker at the NARUC Introductory Regulatory Training Program and a panelist at a conference on

LDC and Pipeline Ratemaking sponsored by the Institute of Gas Technology. I have presented a paper on stranded costs at the 21st Annual International Conference of the International Association for Energy Economics. I have had two papers on transmission congestion pricing and one paper on reorganizing markets published in *The Electricity Journal*. I am also a Certified Energy Procurement Professional by the Association of Energy Engineers.

In January 1982, I joined the firm of Drazen-Brubaker & Associates, Inc., the predecessor of Brubaker & Associates. Since that time, I have presented expert testimony on the subjects of industry restructuring, open access transmission, marginal and embedded class cost of service studies, prudence and used and useful issues, electric and gas rate design, revenue requirements, natural gas transportation issues, demand-side management, and forecasting.

I have previously testified before the Federal Energy Regulatory Commission as well as the public service commissions of Arizona, Connecticut, Delaware, Florida, Idaho, Illinois, Iowa, Massachusetts, Michigan, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, Wyoming and the Provinces of Alberta, British Columbia, New Brunswick, Nova Scotia, and Saskatchewan in Canada. I have also testified before the Michigan Senate Technology and Energy Committee.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.