

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)

Rebuttal Testimony and Exhibits of

Dr. Alan Rosenberg

On Behalf of

Illinois Industrial Energy Consumers

October 23, 2008
Project 8996



BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

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I.C.C. DOCKET NO. 08-0363

HDC EXHIBIT No. 2.0

Witness TG

Date 11/19/08 Reporter TG

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1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A My name is Dr. Alan Rosenberg. My business address is 16690 Swingley Ridge
3 Road, Suite 140, Chesterfield, MO 63017.

4 Q ARE YOU THE SAME DR. ALAN ROSENBERG WHO FILED DIRECT TESTIMONY
5 IN THIS PROCEEDING?

6 A Yes.

7 Q WHAT ARE THE ISSUES DEALT WITH IN YOUR REBUTTAL TESTIMONY?

8 A This testimony concerns itself with eight issues raised or discussed in the direct
9 testimony of the Illinois Commerce Commission (ICC or Commission) Staff and the
10 rebuttal testimony of Nicor Gas Company (Nicor or Company):

- 11 1. The insistence of Nicor witness Mr. Mudra and Staff witness Mr. Lazare to
12 continue the intentional subsidization of Rate 1 at the expense of the commercial,
13 small business and industrial customers.
- 14 2. The inadvertent allocation of storage losses to transportation customers, who
15 already pay for those losses in kind.
- 16 3. The Nicor position that storage costs should be allocated to transportation classes
17 on the same basis that these costs are allocated to classes for whom storage is

18 bundled in the rates -- regardless of the amount of storage that these
19 transportation customers actually take.

20 4. Nicor's refusal to extend the use of its Modified Distribution Main (MDM)
21 engineering study to the portion of mains that are classified as average demand-
22 related, thus improperly imputing usage of small diameter mains to customer
23 classes who make little or no use of those size mains.

24 5. Mr. Lazare's rate design proposals for Rate 77.

25 6. The calculation of the Storage Banking Services (SBS) charge.

26 7. The amount of Nicor's total underground storage capacity that should be made
27 available at a cost-based rate to Nicor's transportation customers.

28 8. The proposal to further restrict the ability of transportation customers to store gas.

29 **Q WHOSE POSITIONS AND ASSERTIONS ARE YOU REFUTING OR RESPONDING**
30 **TO IN THIS REBUTTAL TESTIMONY?**

31 A I am rebutting the positions and conclusions of Nicor witnesses Mudra, Heintz and
32 Bartlett, (Mudra, Nicor Ex. 29.0; Heintz, Nicor Ex. 30.0; Bartlett, Nicor Ex. 19.0) taken
33 in their rebuttal testimonies, as well as some of the positions and rationale of ICC
34 Staff witness Lazare. (Lazare, ICC Staff Ex. 7.0).

35 On the first issue, both Mr. Mudra and Mr. Lazare provide reasons for the
36 continued subsidization of Rate 1 by the commercial and industrial customers of
37 Nicor. I will show that those reasons either are not harmonious with sound regulation,
38 or are applied selectively and not objectively.

39 On the second issue, I show that Mr. Heintz, in his rebuttal testimony, failed to
40 fully correct for gas losses that were mislabeled and mishandled in his direct
41 testimony and exhibits.

42 On the third issue, I demonstrate that, contrary to the assertions of Mr. Heintz
43 and Mr. Mudra, the disconnect between the allocation of storage costs to unbundled
44 customers, and setting of the SBS charge, can distort the results of the cost of service

45 study and lead to Nicor over-collecting distribution costs from these unbundled
46 customers.

47 On the fourth issue, I explain why Mr. Mudra's response to my
48 recommendation to extend the use of the MDM study is inadequate and unsupported.

49 On the fifth issue, I object to Mr. Lazare's recommendation for a ten-fold
50 increase in the tail-block demand charge and show why it is not grounded in cost
51 causation.

52 On the sixth issue, I refute Nicor's contention that it has not changed the
53 formula for calculating the SBS charge and show the result of adherence to the
54 formula approved by the ICC in Nicor's last rate case.

55 On the seventh issue, I refute Nicor's contention that reducing the allocation of
56 storage capacity to transportation customers, vis-à-vis the formula approved by the
57 Commission in the last case, is necessary in order to be fair to sales customers.

58 Finally, on the last issue, I counter Mr. Bartlett's contention that new
59 restrictions on daily nominations are necessary. I also critique his Nicor Exhibit 19.3
60 that purports to show that storage activity by transportation customers is detrimental
61 to sales customers.

62 **The Issue of Whether or Not to Subsidize**
63 **Rate 1 at the Expense of All Other Customers**

64 **Q WHAT IS THE CRUX OF THIS ISSUE?**

65 **A** In the last Nicor rate case (Docket No. 04-0779), the ICC limited the increase to Rate
66 1 out of concern for rate impact to that class. In this case, Nicor witness Mudra and
67 Staff witness Lazare want to continue that subsidization, although to a lesser degree.

68 Specifically, they recommend that the Rate 1 revenues be set to only 97.5% of the
69 Rate 1 cost of service. (Nicor Ex. 29.0 at 4, and ICC Staff Ex. 7.0 at 29).

70 **Q HOW DOES MR. LAZARE RATIONALIZE BRINGING RATE 1 ONLY PART OF**
71 **THE WAY TO COST OF SERVICE, AND OVERCHARGING ALL THE OTHER**
72 **RATE CLASSES AS A RESULT?**

73 **A** Mr. Lazare attempts to rationalize this departure from cost-based rates on the
74 grounds that:

- 75 • It (is) necessary to give some consideration to bill impacts;
- 76 • This approach is reasonable "given the economic difficulties encountered by Nicor
77 customers;"
- 78 • Alongside the increase in gas costs, ratepayers are experiencing increases in
79 other energy costs. (Lazare, ICC Staff Ex. 7.0 at 29).

80 **Q DO YOU AGREE WITH MR. LAZARE'S OSTENSIBLE REASONS?**

81 **A** No. First, let us focus on the last two of those three reasons, economic difficulty and
82 the increase in other energy costs. The problem with those excuses to overcharge all
83 other customers, is that they do not pertain exclusively to Rate 1 customers. Nor are
84 those circumstances even applicable to all Rate 1 customers. There may very well
85 be customers in Rate 1 that are encountering economic difficulties, but there may be
86 other customers in Rate 1 that are doing perfectly well. The same can be said for the
87 other customer classes – there may be some commercial and industrial businesses
88 that are encountering economic difficulties, and there may be others that are not.
89 Certainly, Mr. Lazare has not produced any economic studies that would shed any
90 light on this. Thus, this rationale of "economic difficulty" does not apply to any single
91 class, and thus is not a basis to discriminate one class from another.

92 Likewise, the increase in natural gas and electricity prices affects all
93 customers, not just Rate 1 customers. Again, this may be a valid reason to curtail the
94 overall increase awarded to Nicor, but it does not hold water as an excuse to
95 discriminate among customer classes.

96 **Q LET US RETURN TO THE FIRST OF MR. LAZARE'S OSTENSIBLE REASONS**
97 **FOR RATE DISCRIMINATION. YOU WILL AGREE WOULD YOU NOT, THAT**
98 **SOMETIMES REGULATORS TEMPER THE INDICATIONS OF A COST OF**
99 **SERVICE STUDY AS A CONCESSION TO BILL IMPACT CONSIDERATIONS?**

100 **A** Yes, I would agree that Commissions sometimes moderate movement toward cost
101 based rates because of consideration of bill impacts. However, if that were the
102 situation in this case, it would be Rate 77 whose increase should be tempered, not
103 Rate 1. According to the Company cost of service study, which is the study
104 Mr. Lazare relied upon, the following percentage increases would be indicated to
105 reach parity: (Nicor Ex. 15.1, Schedule B, Column (I)).

TABLE 1	
<u>Cost-Based Increase Indicated by Nicor Cost of Service Study</u>	
<u>Class</u>	<u>Increase</u>
Rate 1	34.7%
Rate 77	53.3%

106 Consequently, if bill impact is your primary consideration, it makes no sense to
107 limit the increase to Rate 1 and give a larger than cost-based increase to Rate 77.
108 Mr. Lazare's appeal to rate-impact considerations is clearly arbitrary and subjective.

109 Q WHAT ARE MR. MUDRA'S STATED REASONS FOR CONTINUING TO
110 SUBSIDIZE RATE 1 AT THE EXPENSE OF ALL THE OTHER CLASSES?

111 A Mr. Mudra gives three reasons:

112 1. First, he claims this is in the spirit of "gradualism" as expressed in the
113 Commission's Order in the 2004 rate case. He claims that it is sufficient to bring
114 Rate 1 to its full cost of service "in the next rate case". (Mudra, Nicor Ex. 29.0
115 at 6).

116 2. Second, he states that, despite overcharging commercial and industrial
117 customers, the increases to Rate 76 and Rate 77 are "not onerous". (*Id.* at 7).

118 3. Finally, he claims that because natural gas prices are so volatile, "[t]he increase
119 Nicor Gas is proposing pales in comparison." (*Id.* at 7:149 – 151) The gist of
120 Mr. Mudra's argument is that Nicor's requested increase will sort of get lost in the
121 shuffle.

122 Q ARE THESE VALID OR COMPELLING REASONS TO CONTINUE THE SUBSIDY
123 FOR RATE 1?

124 A No. Consider the first reason cited by Mr. Mudra. As I previously explained in
125 response to Mr. Lazare's argument, if any moderation in reaching cost-based rates
126 were required, that principle of gradualism should be applied to the classes that are
127 slated for the largest increases. Moderation should be applied in an objective
128 fashion, not in an arbitrary manner.

129 As to the second reason, I suppose whether or not a rate impact is onerous
130 depends upon whose ox is being gored. For example, one could say that bringing
131 Rate 1 all the way to cost would require an increase of just \$5.19¹ per average bill,

¹ \$124,960,000 annual increase ÷ 2,005,488 customers ÷ 12 bills per year = \$5.19/bill
Values taken from Nicor's rebuttal cost of service study at 100% of cost.

132 instead of \$4.69,² or a difference of only 50 cents per bill.³ Moreover, that is at full
133 rate relief. I might also add that if Nicor is so concerned about the impact of its rate
134 increase, it should not be requesting an increase in its return on equity, which adds
135 \$9 million to the revenue request. (Hawley, Nicor Ex. 1.0 at 7).

136 Finally, I find Mr. Mudra's third ostensible reason for intentionally overcharging
137 its industrial and other business customers to be quite disturbing. In my years of
138 experience, I cannot recall encountering a responsible witness taking the position that
139 it is quite acceptable to overcharge customers on the basis that they would probably
140 not notice it because commodity prices were so high. In my view, this Commission's
141 endorsement of such a cynical position, which is of course completely at odds with
142 the principles of cost of service and equity, would send a chilling message to
143 industrial concerns who were considering coming to, or expanding in, the state of
144 Illinois. That attitude would not help the job situation in Illinois in these volatile times.

145 **Q IF THE COMMISSION WERE TO TEMPER THE INDICATIONS OF AN ACCURATE**
146 **COST STUDY IN ALLOCATING THE INCREASE, HOW WOULD YOU**
147 **RECOMMEND IT COULD BE DONE IN A MORE OBJECTIVE AND RATIONAL**
148 **MANNER?**

149 **A** That depends upon how much confidence the Commission has in the accuracy of
150 whichever cost of service study it uses as the guide for revenue allocation. Assuming
151 the Commission has a high degree of confidence in the accuracy of the selected
152 study, but nevertheless its intentions are to make concessions on the basis of rate

² \$112,989,000 annual increase ÷ 2,005,488 customers ÷ 12 bills per year= \$4.69/bill
Values taken from Nicor's Revised Exhibit 14.6, provided in response to Data Request IIEC
5.12 (see Appendix A).

³ This is based on the cost of service study relied upon by Mr. Mudra.

153 impact, I would suggest limiting the cost-based increase to any class to no more than
154 twice the system average increase. To the extent that this limitation results in a
155 shortfall of the total revenue requirement, the shortfall should be apportioned on an
156 equal percentage of cost among those classes that are below that 2-times limit. (This
157 process may need to be repeated if the redistribution causes another class to exceed
158 the 2-times limit.)

159 On the other hand, if the Commission has concerns about any particular cost
160 of service study, my recommendation would be to effect the increase as a uniform
161 percentage increase to base rates, across the board.

162 **The Issue of Whether Storage Losses**
163 **Should be Allocated to Transportation Classes**

164 **Q WHAT ARE STORAGE LOSSES?**

165 A Storage losses refer to the fact that as Nicor physically operates its storage fields,
166 some gas is irretrievably lost. Nicor accounts for this fact with its 2% withdrawal
167 factor, as explained starting on page 7 of Mr. Bartlett's rebuttal testimony. (Nicor Ex.
168 19.0).

169 **Q IN WHICH FERC ACCOUNT ARE THESE LOSSES RECORDED?**

170 A The costs of these losses are recorded in Account 823, Gas Losses. For the rate
171 year, the amount claimed by Nicor is \$15.23 million, and this is a component of
172 Nicor's claimed O&M expenses that it seeks to recover in this case.

173 Q SHOULD ANY OF THIS \$15.23 MILLION BE ALLOCATED TO TRANSPORTATION
174 CUSTOMERS?

175 A No. Storage losses are part of Nicor's lost and unaccounted for gas. Transportation
176 customers pay for these costs "in kind," that is, by bringing more gas into the system
177 than they are given credit for. (See Nicor Response to Data Request IIEC 4.04, see
178 attached Appendix A.) For example, If the lost and unaccounted for factor is 2.5%,
179 the transportation customers must bring in 102.5 therms for every 100 that is metered
180 at their facilities.

181 Q IS YOUR ANSWER TO THE LAST QUESTION IN DISPUTE?

182 A I do not believe it is. Both Nicor and the Staff agree that Account 823 costs should
183 not be allocated to transportation customers and should not be included in the SBS
184 charge, the charge that transportation customers pay for the storage service they
185 select.

186 Q WERE ACCOUNT 823 COSTS INCLUDED IN THE CALCULATION OF THE SBS
187 CHARGE IN NICOR'S LAST RATE CASE, DOCKET NO. 04-0779?

188 A No. (See Nicor Response to Data Request IIEC 4.01, see Appendix A.).

189 Q IF THERE IS NO DISPUTE THAT ACCOUNT 823 COSTS SHOULD NOT BE
190 ALLOCATED TO TRANSPORTATION CUSTOMERS AND SHOULD THEREFORE
191 NOT BE INCLUDED IN THE CALCULATION OF THE SBS, WHY DO YOU RAISE
192 THIS ISSUE IN YOUR REBUTTAL TESTIMONY?

193 A In reviewing Nicor's cost of service study, I had noticed that Account 823 costs were
194 being allocated to the transportation classes, and in particular to Rate 76 and

195 Rate 77, the tariffs on which the IIEC customers take service. When I inquired as to
196 the nature of these costs, Nicor responded (see Data Request IIEC 3.01, see
197 Appendix A) that it had "inadvertently" recorded these storage losses in Account 824,
198 entitled "Other Expenses."⁴ As such, they were incorrectly allocated to the
199 transportation classes.

200 **Q IN MR. HEINTZ'S RESPONSE TO DATA REQUEST IIEC 5.10, PART C, (SEE**
201 **APPENDIX A) HE STATES THAT ACCOUNT 823 EXPENSES WERE NOT**
202 **ALLOCATED TO RATE 76 AND RATE 77. HOW DOES THAT COMPORT WITH**
203 **YOUR PREVIOUS ANSWER?**

204 **A** Mr. Heintz is simply mistaken. I reviewed the cost of service study that Mr. Heintz
205 submitted with his direct testimony. This study was provided to IIEC in electronic
206 format in response to Data Request IIEC 1.02 (See Appendix A). In fact, I went to the
207 tab ECOSS Allocation (G), Spreadsheet Row 297, that Mr. Heintz refers to in his
208 answer. I found that Rate 76 was allocated \$660,000 of the \$15.23 million (reference
209 cell [BT297]) and Rate 77 was allocated \$560,000 (reference cell [BY297]). I was
210 also able to follow the descendents of this cell and can confirm that these costs are
211 included in the O&M expenses that Mr. Heintz's study attributes to these classes.
212 (The same mistake would also pertain to Rates 74 and 75).

⁴ On page 36, Mr. Mudra mischaracterizes my direct testimony as questioning whether the \$15.23 million for gas losses was reasonable. Of course, when I drafted my direct testimony I was unaware of Nicor's error, and thought these costs were "Other Expenses."

213 **Q HAS MR. HEINTZ REVISED ANY OF HIS SCHEDULES TO MODIFY THE**
214 **TREATMENT OF GAS LOSSES IN HIS REBUTTAL TESTIMONY?**

215 A Yes. On page 2 of his rebuttal testimony, Mr. Heintz states that he has revised
216 Schedule E to account for the fact that he "inadvertently excluded the value of gas
217 storage losses." His Revised Schedule E, Column E, now includes gas storage
218 losses of \$15.23 million, and this same amount is subtracted from Column F (Total
219 Without Top Gas and Losses). Given the changes made by Mr. Heintz to properly
220 account for gas storage losses, I agree that the revised Schedule E is correct.

221 **Q DO YOU ALSO AGREE THAT REVISED SCHEDULE E NOW SOLVES THE**
222 **PROBLEM WITH STORAGE LOSSES?**

223 A No. Schedule E is used for one purpose, and for one purpose only. It is used to
224 derive the numerator for the SBS charge. Because Mr. Heintz supplied Mr. Mudra
225 with a corrected Schedule E, Mr. Mudra reduced the proposed SBS charge from
226 .0051 cents per month per therm of capacity to .0042 cents per month, a reduction of
227 over 17%. However, Mr. Heintz never corrected the error on the other pages (or tabs
228 if you are speaking of his spreadsheet) of the cost of service study. Because these
229 other pages of the cost study, and in particular Schedule C of the cost study, are
230 used as inputs to Mr. Mudra's proposed allocation of the revenue increase,⁵ there is
231 still a major problem.

⁵ Column C of Exhibit 14.6, Allocation of Proposed Revenue Adjustment to Base Rates, is taken directly from Column C of Schedule C of the cost of service study.

232 **Q HAS MR. HEINTZ ADDRESSED THIS ISSUE IN TESTIMONY OR IN RESPONSE**
233 **TO DATA REQUESTS?**

234 A Yes. In response to data request IIEC 5.02 (see Appendix A), Mr. Heintz states that
235 he did not allocate Account 823 costs to the transportation classes in his rebuttal cost
236 of service study. Mr. Heintz is simply mistaken. I reviewed the cost of service study
237 that Mr. Heintz submitted with his rebuttal testimony. This study was provided to IIEC
238 in electronic format in response to Data Request IIEC 5.10 (See Appendix A). I found
239 that tab ECOSS Allocation (G), Spreadsheet Row 297, which still shows \$15.23
240 million, and which is still incorrectly labeled Account 824, is allocated in the exact
241 same manner as was done in Data Request IIEC 1.02 (See Appendix A). This error
242 allocates \$660,000 of the \$15.23 million (reference cell [BT297]) to Rate 76, and
243 \$560,000 (reference cell [BY297]) to Rate 77. Mr. Heintz just repeated his error.
244 While anyone can of course make an error, I find that repeating that error, and
245 responding incorrectly to a data request when that data request pointedly asked him
246 to review that error, to be troubling.

247 **Q WHAT WOULD BE THE RESULT OF SIMPLY CORRECTING TAB ECOSS**
248 **ALLOCATION (G), SPREADSHEET ROW 297 SO THAT STORAGE LOSSES ARE**
249 **NO LONGER ALLOCATED TO TRANSPORTATION CLASSES?**

250 A I have prepared IIEC Exhibit 2.1, which shows the results of the cost of service study
251 at present rates, and at Nicor's proposed rates, with that one correction. Note that
252 Rate 1 and Rate 75 are the only classes that are significantly below cost of service.
253 In fact, it shows that Nicor is actually losing money serving these two classes. I have
254 also prepared IIEC Exhibit 2.2 to show the results of the cost of service study if it
255 were used to allocate the increase in the manner that Mr. Mudra proposes, i.e.,

256 bringing Rate 1 to only 97.5% of cost. (This exhibit would correspond to Nicor Exhibit
257 14.6, but with Nicor's revised cost of service study, and with the storage loss issue
258 resolved.) Finally, I have prepared IIEC Exhibit 2.3, which shows the result of
259 bringing all classes to parity as measured by this particular cost study.

260 **The Issue of Allocating Storage Costs to Transportation Customers**
261 **Regardless of the Storage Service Selected by Transportation Customers**

262 **Q WHAT IS THE CRUX OF THIS ISSUE?**

263 A For purposes of rate design, Nicor has essentially two types of customers.⁶ The first
264 type are those on rates 1, 4, 5 and 6 who are sales customers and whose rates are
265 bundled.⁷ That means the cost of both delivery and storage is fully integrated in the
266 rate, and thus, they cannot choose one service separate from the other.⁸ The second
267 type of customer are those on Rates 74, 75, 76 and 77 and are identified as
268 "transportation" customers. These transportation customers must take delivery
269 service from Nicor for all their needs, yet have the option of selecting any level of
270 storage service they want, anywhere from one times their Maximum Daily Quantity
271 (MDQ) of gas, up to a maximum multiple of their MDQ. At the present time, that
272 maximum multiple is 28. These customers are charged one set of rates for delivery
273 service, and they are charged separately for the quantity of storage they select. That
274 charge for the storage is termed the SBS charge. By Commission decree, this SBS
275 charge is cost based, and no witness in this case has argued otherwise.

⁶ I am ignoring special contract customers whose rates are not at issue in this proceeding.

⁷ Theoretically there is also a Rate 7, but there are no customers on this rate and, to the best of my knowledge, there have been none for some time.

⁸ These customers can also select to purchase gas from a third party, but that is not an issue in this case.

276 Q **WHAT IS THE FORMULA FOR THE SBS CHARGE?**

277 A The SBS charge is derived by taking a quotient. The numerator is Nicor's embedded
278 cost of storage, which is the return and taxes on the storage rate base, plus all O&M
279 expenses and depreciation and other taxes related to storage, less the return and
280 taxes, i.e., the carrying costs of top gas, and also less the cost of storage losses. The
281 denominator is the total working gas capacity of Nicor's storage fields.

282 Q **WHY ARE THE COSTS OF STORAGE LOSSES AND THE CARRYING COST OF**
283 **THE TOP GAS, EXCLUDED FROM THE NUMERATOR?**

284 A Storage losses are excluded for the reasons explained in the previous section of my
285 testimony. The carrying cost of top gas is excluded because the transportation
286 customers provide and pay for their own portion of the top gas, or as it is sometimes
287 called working gas. Nicor, of course, buys and pays for the gas that is stored on
288 behalf of the sales customers. The gas molecules are comingled, but the amounts
289 are distinguished for ratemaking purposes.

290 Q **HAS ANY PARTY CHALLENGED THE FORMULA FOR THE SBS CHARGE?**

291 A No, not to the best of my knowledge and belief. There is a difference of opinion as to
292 the interpretation or derivation of the working gas capacity, that is, the denominator in
293 the formula. However, no one has disputed the basic philosophy of the formula, and
294 all parties acknowledge that the result, if properly and accurately applied, is a charge
295 that completely recovers the cost of whatever storage capacity these customers
296 reserve – no more and no less.

297 **Q ARE THE REVENUES GENERATED BY THE SBS CHARGE REFLECTED IN**
298 **NICOR'S COST OF SERVICE STUDY?**

299 A Yes. Present revenues reflect the current charge, and proposed revenues reflect
300 Nicor's proposed charge. These charges are multiplied by the presumed number of
301 billing units for this service, which, of course, means the presumed level of storage
302 selected.

303 **Q WHAT IS THE CRUX OF THIS ISSUE?**

304 A The crux of this issue is that Nicor allocates storage costs to the unbundled classes
305 as though storage were bundled in their rates. In other words, when allocating
306 storage costs, Mr. Heintz's cost of service study does not distinguish between the
307 classes that have storage bundled into their rates, and those that do not.

308 **Q WHY IS THIS A PROBLEM?**

309 A It is a problem because Mr. Heintz is allocating costs for a service without regard to
310 how much of the service is actually being taken. It is as if your grocer would charge
311 you for apples at the checkout counter without weighing your bag. Mr. Mudra
312 appears to be of the same mind and even goes so far as to say that it would be
313 appropriate to allocate *the same amount* of storage costs to these classes **even if**
314 **they were to elect no storage at all!**⁹ (Nicor response to Data Request IIEC 5.14
315 part b, see Appendix A.)

⁹ Admittedly, this is a hypothetical situation because these customers are required to elect at least one times their MDQ of storage. Nevertheless, it illustrates the absurdity of the Nicor position.

316 **Q** **IS IT MR. HEINTZ'S POSITION THAT THE AMOUNT OF COSTS ALLOCATED TO**
317 **A CLASS SHOULD BE INDEPENDENT OF, OR DISCONNECTED FROM, THE**
318 **LEVEL OF SERVICE PROVIDED TO THAT CLASS?**

319 **A** No. Mr. Heintz acknowledges that there must be a nexus between the level of
320 service taken and the cost responsibility allocated. (See Nicor response to Data
321 Request IIEC 5.04, see Appendix A). The cost that a customer or class of customers
322 imposes is a function of the service they receive. Clearly, a cost of service study
323 cannot be considered to reflect reality if the costs it assigns are independent of the
324 costs that are actually caused.

325 **Q** **CAN THIS DISCONNECT DISTORT THE RESULTS OF THE COST STUDY?**

326 **A** Yes. Suppose for example that Rate 77 customers were assumed to select one day
327 of storage, but that Nicor were to allocate 28 days (Nicor's maximum allowed) worth
328 of costs. The revenue would reflect one day times 12 months times the SBS charge.
329 However, the total cost would reflect 28 times that amount of storage. Clearly, even if
330 the SBS charge were cost based, the study would appear to show that the revenues
331 of Rate 77 were deficient. The only "remedy" to this would be to make up for the
332 deficiency by overcharging this class for the delivery service.

333 **Q** **DOES MR. HEINTZ CONCEDE THAT HIS ALLOCATION OF STORAGE COSTS**
334 **TO THESE UNBUNDLED CLASSES IS NOT SYNCHRONIZED WITH THE LEVEL**
335 **OF STORAGE SERVICE THESE CUSTOMERS TAKE?**

336 **A** Yes. In response to IIEC Data Request 5.03 (see Appendix A) he states:

337 Mr. Heintz agrees that the allocator for storage costs – firm peak
338 demands by class (after directly assigning some costs to Rate 17) –
339 may not exactly reflect the amount of storage services elected by
340 Transportation customers.

341 Q HOW DO MR. HEINTZ AND MR. MUDRA ATTEMPT TO JUSTIFY ALLOCATING
342 STORAGE COSTS TO CLASSES FOR WHOM STORAGE SERVICE IS
343 UNBUNDLED, WITHOUT REGARD TO THE QUANTITY OF SERVICE TAKEN?

344 A They make the following assertions:

345 In this case, Mr. Heintz understands that in designing the base rates
346 for transportation customers, **Nicor adjusts the allocated costs to**
347 **remove allocated underground storage costs.** The customers then
348 pay for the amount of underground storage service they select by
349 paying a rate specific to such costs.

350 (Mr. Heintz; Nicor Response to IIEC Data Request 5.04, see
351 Appendix A, emphasis added)

352 When designing the companion Sales and Transportation rates, Nicor
353 Gas allocates the fully subscribed storage revenue requirement from
354 the ECOSS to the companion rate classes **and then removes the**
355 **storage cost from the Transportation rates** thereby properly
356 establishing both the fully bundled Sales service rate, which includes
357 storage, and the unbundled Transportation service rates. **Therefore,**
358 **storage costs are not included in Transportation customer base**
359 **rates.**

360 (Mr. Mudra; Nicor Response to IIEC Data Request 5.14, see
361 Appendix A, emphasis added)

362 In other words, while they seem to recognize that there should be no
363 additional storage costs allocated to the transportation customers (other than the
364 amount that is properly matched with those recovered through the SBS charge), and
365 while they also acknowledge that storage costs are allocated to the transportation
366 classes without regard to the amount of storage service actually taken, they claim that
367 the problem is fully resolved through the rate design process.

368 Q WHY THEN DO YOU BELIEVE THERE IS STILL A PROBLEM?

369 A There is still a problem, because I am concerned that those responses are incorrect.
370 I have closely examined Nicor's workpapers in this case, from the cost of service
371 study, through the revenue allocation process, and all the way through to rate design.

372 Nowhere in these workpapers could I find evidence that Nicor has removed storage
373 costs from the transportation customers' rates.

374 If Nicor truly does remove storage costs from the transportation customers'
375 rates during rate design, it should not have allocated them to the transportation
376 customers in the first place. It should have simply used the cost study to allocate
377 costs and determine the delivery charges for transportation customers, and
378 determined the SBS charge through Schedule E of the cost study.

379 **Q YOU ASSERT THAT NICOR'S RATE DESIGN CLAIMS - WHICH YOU CITE FROM**
380 **THEIR RESPONSES TO DATA REQUESTS IIEC 5.04 AND 5.14 ABOVE (SEE**
381 **APPENDIX A), ARE MISPLACED. CAN YOU DEMONSTRATE THAT NICOR'S**
382 **ASSERTIONS IN THIS REGARD ARE INCORRECT?**

383 **A** Yes. As they say, the proof is in the pudding. As I explained previously in this
384 rebuttal testimony, Nicor has acknowledged a mistake in calculating the numerator of
385 the SBS charge, because it "inadvertently" included Storage Losses. When it
386 removed the losses, the monthly SBS charge went from .0051 cents to .0042 cents.
387 If what it claims is true, this should have had no impact on the delivery rates for the
388 transportation customers. However, that is not the case, as is shown in the table
389 below. This table compares the delivery revenues and storage revenues for Rate 77
390 that Nicor proposed in its direct case, with the delivery revenues and storage
391 revenues that it proposed in its rebuttal case.

TABLE 2			
<u>Nicor Revenue Targets for Rate 77</u>			
	<u>Direct</u> <u>Case</u> (000)	<u>Rebuttal</u> <u>Case</u> (000)	<u>Dollar</u> <u>Change</u> (000)
Delivery Revenue	\$8,292	\$8,913	\$ 621
Storage Revenue	3,133	2,580	(\$ 553)
Total	\$11,425	\$11,493	\$ 68

392 Note that while the Storage Revenue declined by over a half million dollars
 393 (because of the correction in the storage losses) and the total revenue for Rate 77
 394 changed very little, the delivery revenues went up by \$621,000 or 7.5% from the very
 395 large increase Nicor had proposed in its direct case. What is the reason for this?
 396 The reason is that there is no connection between the storage costs allocated to this
 397 class in the cost study and the amount of storage revenues collected by the cost-
 398 based SBS charge. Thus, any "shortfall" between the two is simply absorbed into the
 399 delivery charge. But there should be no shortfall because everybody agrees that, by
 400 design, the SBS charge (if properly calculated) recovers exactly the correct amount of
 401 storage costs.

402 **Q HOW CAN THIS PROBLEM BE CORRECTED?**

403 A The problem can be corrected very easily and in a very straight-forward manner by
 404 simply assigning the transportation customers the same storage costs as is reflected
 405 in the presumptive SBS revenues, that is, by synchronizing the two amounts.
 406 (Another way to rectify the problem would be to remove both storage costs and SBS
 407 revenues from the transportation classes in the cost of service study. However, it

408 would then be necessary to credit the sales classes with the expected SBS revenues,
409 or else Nicor would over-recover its storage costs.)

410 **Q MR. MUDRA, IN HIS REBUTTAL TESTIMONY, STATES THAT THE REMEDY YOU**
411 **PROPOSE IS PROBLEMATIC BECAUSE, AS HE PUTS IT, "INSTEAD OF THE**
412 **STANDARD PRACTICE OF COSTS BEING RECOVERED BY REVENUES,**
413 **DR. ROSENBERG'S PROPOSAL WOULD HAVE REVENUES DRIVE COSTS."**
414 **COULD YOU PLEASE COMMENT?**

415 **A** Mr. Mudra *would* be correct if, *and only* if, the SBS charge were derived in isolation
416 from the cost study. In that case, allowing revenues to drive cost allocation would be
417 like having the tail wag the dog. However, what Mr. Mudra conveniently ignores is
418 that the SBS charge is derived directly from the cost of service study (in fact, from
419 Schedule E in Mr. Heintz's cost of service study). Thus, as long as Nicor includes the
420 SBS revenues in class revenues, it is imperative that the cost allocation of storage be
421 consistent with the assumption on the revenues. Otherwise, any mismatch will spill
422 over and distort the alignment of the delivery costs with delivery revenues.

423 **The Issue of Whether the MDM Engineering Study Should be Confined**
424 **to Only the Peak Demand-Related Component of Distribution Mains**

425 **Q WHAT IS THE BACKGROUND OF THIS ISSUE?**

426 **A** According to the Average and Peak Method, the cost of the system of distribution
427 mains is essentially divided in two pieces. The cost of the first piece (the larger piece)
428 is deemed to be demand related and is allocated accordingly. However, the full
429 demands of each class are not used for every diameter of mains. The demands are
430 modified so as to reflect the results of an engineering study which shows the relative

431 usage of each diameter mains. The gas flows from large diameter mains to smaller
432 diameter mains, much as the branches of a tree will go from the larger branches
433 down to the medium sized branches and so on. Because the capacity of a smaller
434 diameter main is often not sufficient to meet the hourly demands of a large customer,
435 the large volume customers do not make much use of the smaller diameter mains.
436 This study is termed the MDM study and has been accepted in previous rate cases.

437 **Q HOW IS THE COST OF THE SECOND PIECE OF THE DISTRIBUTION MAINS**
438 **ALLOCATED?**

439 A The second piece is deemed to be "volume" related under the Commission-approved
440 methodology, and is allocated on the basis of average demands. (Since average
441 demand is simply the annual volume divided by 356 days, the result is the same as
442 allocating on the basis of volume.)

443 **Q IS THE MDM STUDY USED TO MODIFY THE AVERAGE DEMANDS?**

444 A No, and that is the crux of the issue. The MDM study has relevance not only to the
445 allocation of the peak-demand-related portion of mains, but also to the allocation of
446 the average-demand-related portion of mains. As I noted in my direct testimony, just
447 as large volume users make relatively little use of the small diameter mains on the
448 peak day, they make little use of those diameter mains on any other day as well.

449 Q DOES MR. MUDRA DENY THAT IF A CUSTOMER DOES NOT USE, LET US SAY,
450 2-INCH MAIN ON THE PEAK DAY, THAT SAME CUSTOMER DOES NOT USE
451 2-INCH MAIN ON ANY OTHER DAY AS WELL?

452 A No. In response to Data Request IIEC 5.13 (see Appendix A) he agrees with that
453 physical fact.

454 Q DOES MR. MUDRA DISAGREE WITH THE LOGIC OF EXTENDING THE MDM
455 STUDY TO AVERAGE DEMANDS, AND NOT JUST PEAK DEMANDS?

456 A No.

457 Q DOES MR. MUDRA AGREE THAT IT WOULD BE APPROPRIATE TO
458 EXTRAPOLATE THE FINDINGS OF THE MDM STUDY IN THIS CASE TO
459 AVERAGE DEMANDS AS WELL AS PEAK DEMANDS?

460 A No, he does not. But he does agree to study this proposal for possible use when
461 Nicor files its next rate case.

462 Q IS THAT A SATISFACTORY RESPONSE TO YOUR PROPOSAL?

463 A No. Mr. Mudra could not say when Nicor would file its next rate case. Prior to this
464 case, Nicor went approximately 10 years between rate cases. It is not fair to maintain
465 a known inequity for such an extended stretch of time, especially when a remedy is at
466 hand.

467 **Q** **WHAT REASONS DOES MR. MUDRA GIVE IN HIS TESTIMONY FOR NOT**
468 **ACCEPTING YOUR PROPOSED MODIFICATION TO EXTEND THE MDM STUDY**
469 **TO THE ENTIRE SYSTEM OF DISTRIBUTION MAINS, AND NOT JUST A PART**
470 **OF IT?**

471 **A** The only "reasons" Mr. Mudra gives in his rebuttal testimony for not accepting this
472 modification are: (1) the Nicor study in this case comports with the methodology used
473 to allocate distribution mains in the last case; and (2) Nicor has already proposed to
474 move Rate 1 to 97.5% of its cost of service (as shown by the flawed Nicor study) and
475 accepting this modification would indicate that an even larger increase was warranted
476 for Rate 1, and a smaller increase for all the other classes. (Mudra; Nicor Ex. 29.0 at
477 4).

478 **Q** **ARE THOSE VALID REASONS FOR NOT IMPROVING THE ACCURACY OF THE**
479 **COST OF SERVICE STUDY?**

480 **A** No. As to the first reason, the ICC has consistently stated that it is prepared to
481 consider modifications to an allocation methodology, as long as the changes are
482 adequately supported and cogent reasons are presented. As to the second reason, it
483 is never appropriate to accept or reject a particular method because one does not like
484 the indications that the method gives in terms of rate design. A cost of service study
485 is meant to measure each class's responsibility for the costs that are imposed on the
486 utility, in an accurate and objective manner as is possible. The degree to which the
487 Commission wishes to apply the results of that study in the revenue allocation
488 process is a totally separate issue.

489 **Q DOES MR. MUDRA BELIEVE THAT IT IS PROPER TO ACCEPT OR REJECT A**
490 **PARTICULAR COST OF SERVICE METHODOLOGY BASED ON THE REVENUE**
491 **DISTRIBUTION IMPLICATIONS OF THE METHODOLOGY?**

492 **A** That is difficult to say. IIEC posed this question as Data Request IIEC 5.13, part a.
493 (See Appendix A) Nicor objected to the question as vague and ambiguous, although I
494 believe the question is rather clear and straightforward. In any case, Mr. Mudra
495 refused to answer the question. Moreover, I find Nicor's opposition to extending the
496 MDM study to be odd in view of the fact that Nicor takes the position that all these
497 costs are fixed and therefore using average demands (or their equivalent, volumes) to
498 apportion these costs over-allocates these costs to the higher load factor classes.

499 **Q WOULD YOU AGREE THAT YOUR EXTENSION OF THE MDM STUDY TO THE**
500 **AVERAGE-DEMAND-RELATED COMPONENT RESTS ON THE ASSUMPTION**
501 **THAT ANNUAL VOLUME FLOWS BY MAIN SIZE AND RATE CLASS ARE IN THE**
502 **SAME PROPORTION AS PEAK-DAY VOLUME FLOWS BY MAIN SIZE AND RATE**
503 **CLASS?**

504 **A** Yes. However, that is not an unreasonable assumption. Moreover, while it may not
505 be exact, it is certainly better to be approximately right, than it is to be absolutely
506 wrong. To allocate small diameter mains to customers that do not use those mains
507 would be absolutely wrong. Thus, as I have explained in my direct testimony,
508 extrapolating the MDM study to both components of mains -- peak-demand-related
509 and average-demand-related, will clearly improve the accuracy of the study.

510 Q WHAT WOULD BE THE RESULT OF CORRECTING THE NICOR COST OF
511 SERVICE STUDY FOR BOTH THE ERROR CONCERNING THE MISALLOCATION
512 OF STORAGE LOSSES AND MODIFYING THE STUDY TO EXTEND THE MDM
513 STUDY TO ALL OF THE DISTRIBUTION MAINS?

514 A I have prepared IIEC Exhibit 2.4, which shows the results of the cost of service study,
515 at present rates, and Nicor's proposed rates, with that one correction and that one
516 modification. I have also prepared IIEC Exhibit 2.5 which shows the results if this
517 same cost of service study were used to allocate the increase in the manner that
518 Mr. Mudra proposes, i.e., bringing Rate 1 to only 97.5% of cost. (This Schedule
519 would correspond to Nicor Exhibit 14.6, but with Nicor's revised cost of service study
520 reflecting the corrections and modifications.) Finally, I have prepared IIEC Exhibit 2.6
521 which uses the same study, but shows the result of bringing all classes to parity as
522 measured by this particular study.

523 **The Issue of Mr. Lazare's recommended Rate Design for Rate 77**

524 Q DO YOU HAVE ANY ISSUES WITH MR. LAZARE'S RECOMMENDATION ON
525 RATE DESIGN FOR RATE 77?

526 A Yes. Mr. Lazare is proposing to increase the tail-block in the Rate 77 demand
527 charge, which applies to all demand over 10,000 therms. In fact, he is proposing to
528 increase it over one thousand (1,000) percent. Thus, simply on the basis of
529 gradualism, this proposal ought to be rejected outright. Even Mr. Lazare appears to
530 be sensitive to the enormity of this proposal because he also offers an alternative
531 where the tail-block is increased "only" 533 percent.

532 Q DOES MR. LAZARE'S PROPOSAL FOR RATE 77 PRODUCE ANOMALOUS
533 RESULTS?

534 A I would say it does. For example, an examination of Mr. Lazare's bill comparison
535 (Staff Ex. 7.0, Schedule 7.05, page 12) shows that if a Rate 77 customer, with a 50%
536 load factor, uses 50,000 therms per month, it would see a 19 percent increase, but if
537 it uses 100,000 therms per month it would see a 45 percent decrease. That does not
538 make much sense to me. Mr. Lazare's exhibit is even more interesting for what it
539 does not show. The largest size customer on his exhibit uses only 500,000 therms
540 per month. However, the average customer on this rate uses almost 1,000,000
541 therms per month, and some use a great deal more than that. Mr. Lazare's proposal
542 could very well mean close to triple digit increases to these customers.

543 Q WHAT IS MR. LAZARE'S RATIONALE FOR PROPOSING SUCH A DRASTIC
544 INCREASE IN THE TAIL-BLOCK?

545 A Mr. Lazare appears to be troubled by a declining block rate, even though the
546 declining block demand rate for Rate 77 has been approved by the ICC for as far
547 back as I can remember, and that goes back 25 years or so. However, based on his
548 discussion on page 41 of his testimony, I can detect only two reasons that he gives
549 for his radical proposal:

- 550 • First, based on some report that apparently dealt with electricity, he believes that
551 declining block rates will lead to more usage.
- 552 • Second, he states, with no factual or empirical support I might add, that a
553 declining block rate *may* not be consistent with cost-causation principles.
554 (Emphasis added)

555 Q HOW DID NICOR PROPOSE TO CHANGE RATE 77 IN THE PREVIOUS CASE?

556 A In the previous case, Nicor witness Albert Harms proposed to increase the first block
557 of the demand charge by 34% and the tail-block by 275%.

558 Q WHAT CHANGE DID THE COMMISSION APPROVE?

559 A The Commission approved an equal percentage increase for both blocks of the
560 demand charge, which is what Nicor is proposing in this case.

561 Q WILL A DECLINING BLOCK LEAD TO INCREASED USAGE?

562 A No. In fact, the Rate 77 volume in 2009 is a mere 4 percent higher than it was in
563 2005, and the peak demand for this class has even declined. (This means that these
564 customers are using Nicor's distribution system even more efficiently than they did in
565 2005.) As we are all aware, gas is much more expensive than it was a few years
566 ago. To suggest that industrial customers would be wasteful in their gas usage,
567 simply because the demand charge was blocked, is simply not credible.

568 Q IS A DECLINING BLOCK DEMAND CHARGE CONSISTENT WITH
569 COST-CAUSATION PRINCIPLES?

570 A Yes. The reason is that there are economies of scale in serving larger loads. This is
571 because larger loads are served with larger diameter mains. In fact, the capacity of a
572 main increases more than with the **square** of the diameter. Thus, for example, the
573 capacity of a 4-inch main is more than four times the capacity of a 2-inch main, and
574 the capacity of a 6-inch main is more than nine times the capacity of a 2-inch main.
575 However, the cost of the main per foot increases less than linearly in proportion to the
576 diameter. Thus, for example, the per foot cost of a 4-inch main is less than twice the

577 cost of a 2-inch main, and the per foot cost of a 6-inch main is less than three times
578 the capacity of a 2-inch main. Thus, when you do the math, the cost per unit of
579 capacity of a larger diameter main is much less than it is for a smaller diameter main.

580 **Q DOES THIS INVERSE RELATIONSHIP BETWEEN SIZE AND COST PER MCF**
581 **EXHIBIT ITSELF IN THE COST OF SERVICE STUDY?**

582 **A** Yes. According to Nicor's cost of service study, for example, we have the following
583 data:

<u>Class</u>	<u>Mcf/Customer</u>	<u>Cost/Mcf</u>
Rate 74	6,284	\$0.90
Rate 76	159,251	\$0.42
Rate 77	1,086,058	\$0.32

584 If you use the alternative study that I supported in my direct testimony, these
585 relationships are even more pronounced.

586 **The Issue of the Appropriate Denominator for the SBS Charge**

587 **Q WHAT IS THE CRUX OF THIS ISSUE?**

588 **A** In Docket No. 04-0779, Nicor's last rate case, Nicor proposed to set the SBS charge
589 by dividing the pertinent storage costs by the amount of gas that it intended to cycle.
590 The Commission's Order in that case rejected the Nicor position. The Commission
591 reasoned that the SBS charge is assessed on the basis of reserved capacity, and not

592 on the basis of the gas actually cycled. Thus, the Commission ruled that the proper
593 denominator is the total maximum capacity of all of Nicor's underground storage
594 fields, which it found to be 149.74 Bcf. In this case, Nicor is seeking to overturn that
595 decision. I might note that this attempt to overturn the Commission decision in the
596 last case is inconsistent with Nicor's reliance on the Order in the last case as a
597 reason not to extend the MDM study.

598 **Q HOW DID THE COMMISSION ARRIVE AT THE FIGURE OF 149.74 BCF?**

599 A That figure came not from the Staff or from intervenors. That figure was the quantity
600 that Nicor witness Gary Bartlett cited in his testimony as the capacity of Nicor's
601 working gas. By definition, working gas is the gas that Nicor can inject and withdraw
602 from its storage fields.

603 **Q AS YOU NOTED, THE 149.74 BCF FIGURE WAS SUPPORTED AS THE**
604 **WORKING GAS CAPACITY IN THE PREVIOUS CASE. WHY SHOULD THE**
605 **COMMISSION STILL RELY ON THAT FIGURE IN THIS PROCEEDING?**

606 A In Data Request IIEC 2.01 (see Appendix A), the question was posed to Nicor
607 whether its storage fields have experienced any degradation, or conversely any
608 enhancements, in their physical capability to either a) store, b) receive, or c) deliver
609 gas, in the last 5 years. Nicor responded as follows:

610 Nicor Gas' storage fields have not experienced a reduction in their
611 physical ability to store, receive or deliver gas in the last five years.
612 Operating practices and maintenance programs have maintained
613 operating performance levels. In addition, efforts to fully cycle planned
614 seasonal capacity have resulted in improved deliverability at relatively
615 lower inventory levels.

616 Consequently the denominator should be kept at the same level that was
617 found appropriate in the last case.

618 Q HOW DOES NICOR ATTEMPT TO RATIONALIZE THE USE OF A DIFFERENT
619 DENOMINATOR?

620 A Mr. Mudra offers two rationalizations for Nicor's proposed change. First, he states
621 that instead of total maximum capacity, the denominator should be what he claims is
622 "available" storage capacity. The problem with that is Nicor has not provided any
623 evidence that the remaining capacity is "unavailable." As I noted, in response to Data
624 Request IIEC 2.01 (see Appendix A), Nicor acknowledged that there has been no
625 degradation of capacity since the last case. In fact, if anything, it claims that
626 performance has been enhanced. Thus, it appears that Nicor is once again trying to
627 change the definition of capacity.

628 Q WHAT IS THE SECOND REASON THAT MR. MUDRA GIVES FOR CHANGING
629 THE DENOMINATOR?

630 A Mr. Mudra notes that in Docket No. 04-0779, the Commission used the same
631 denominator, 149.74 Bcf, for two purposes. The first purpose, as I have just
632 explained, was as the denominator to derive the SBS charge. The second purpose
633 was to derive the amount of storage made available to the transportation customers.
634 Specifically, the number of days of storage (that is the multiple of the MDQ) was set
635 equal to the storage capacity divided by Nicor's design day peak send-out. In this
636 case, this peak day figure has declined. Thus, if the 149.74 Bcf was also used for
637 this second purpose, Nicor would conclude that the transportation customers would
638 be entitled to 31 days of storage, rather than the current 28. Mr. Mudra then attempts
639 to show that if transportation customers were to elect that additional storage, there
640 would be that much less available to sales customers, and this could reduce the
641 seasonal hedging that Nicor might use to benefit sales customers.

642 **Q IS THIS SECOND REASON PERSUASIVE?**

643 A No. In the first place, Mr. Mudra is incorrect that the two questions (1) how much is a
644 cost-based charge for storage service and (2) how much storage service should be
645 allocated to transportation customers, are inextricably entwined. It is true that the
646 Commission used the same figure in the formula for each, but that is not absolutely
647 necessary. The Commission should make a determination of each of those
648 questions based on the evidence. I will discuss the second question – how much
649 storage capacity should be made available to transportation customers – in the
650 subsequent section of this rebuttal testimony. Nevertheless, the two questions are
651 separate and distinct.

652 **Q WOULD YOU AGREE THAT NICOR, IN THE PAST SEVERAL YEARS, HAS NOT**
653 **TAKEN ITS TOP GAS INVENTORY DOWN TO ZERO?**

654 A Yes.

655 **Q DOESN'T THAT SUGGEST THAT THE MAXIMUM TOP GAS CAPACITY OUGHT**
656 **TO BE REDUCED TO REFLECT THAT FACT?**

657 A No. Transportation customers do not, as a group, take their storage banks down to
658 zero either. Thus, to compare Nicor's so-called "operational" capacity with a
659 "theoretical" capacity for the transportation customer that is unachievable, is an
660 apples-to-oranges comparison. To be equitable, the full maximum working gas
661 capacity must be used to set the maximum SBS reservation. This is what the
662 Commission determined in the previous Nicor case, and Nicor has not met its burden
663 of proof to abandon that decision.

664 Q WHAT SHOULD THE SBS CHARGE BE IF THE DENOMINATOR USED IS
665 CONSISTENT WITH THE ORDER IN THE LAST CASE?

666 A The SBS charge should be \$0.0038 per therm of capacity per month.

667 **The Issue of How Much Storage Capacity**
668 **Should be Made Available to Transportation Customers**

669 Q WHAT ARE THE POSITIONS OF THE PARTIES ON THIS ISSUE?

670 A In the last case, the Commission ruled that the number of days of storage should be
671 calculated by dividing the maximum working gas inventory by the design day
672 demand. Staff and intervenors have taken the position that this formula should be
673 continued which will result in 31 days of storage. Nicor argues that the numerator
674 should be the "operational capacity" that I spoke of before. Nicor's method results in
675 28 days of storage.

676 Q WHY DOES NICOR OBJECT TO THE CONTINUATION OF THE FORMULA
677 APPROVED IN THE LAST CASE?

678 A In the last case, the arithmetic of the formula resulted in a storage multiple of 28 days.
679 However, because the design day demand has been reduced, the application of the
680 same formula in this case would result in 31 days. Mr. Mudra then concludes that this
681 would result in the transportation storage allowance for Rate classes 74, 75, 76, and
682 77 increasing from a maximum of 35 Bcf to 38.75 Bcf, and the allowance for the
683 Customer Select customers going from a maximum of 12.15 Bcf to 13.45 Bcf. Thus,
684 in total the transportation storage allotment, as Mr. Mudra calculates it, would go from
685 a maximum of 51.1 Bcf to a maximum of 56.1 Bcf, an increase of approximately
686 5 Bcf. Because the ability to cycle gas is finite, Mr. Mudra then reasons that this is

687 5 Bcf less gas that Nicor would be able to cycle for the benefit of the sales customers.
688 Since the winter/non-winter differential in the cost of gas runs from approximately
689 10 to 15 cents per therm, Mr. Mudra reasons that using the same formula as
690 approved in the last case would cost sales customers between \$5.0 million and
691 \$7.5 million.

692 **Q IS MR. MUDRA CORRECT?**

693 **A** No, he is not. In the first place, Mr. Mudra conveniently neglects the fact that if
694 transportation customers elect another 5 Bcf in capacity, they would have to pay for
695 that capacity. At \$0.0038 per therm per month that would result in an extra
696 \$2.3 million contribution to Nicor's fixed cost of storage. In the second place,
697 transportation customers do not even elect the maximum amount of storage
698 Mr. Mudra assumes in his illustration. Note that, at 28 days, the current allowance,
699 Mr. Mudra calculates 35 Bcf of storage capacity for the transportation customers
700 (excluding Customer Select). However, Mr. Mudra only includes 27.1 Bcf of storage
701 selected in his proof of revenue calculations. (Response to Data Request IIEC 5.12
702 Ex. 3, see Appendix A). Thus, if we follow Mr. Mudra's logic, we should impute
703 another 8 Bcf of storage revenue to the transportation classes. In the third place,
704 transportation customers only cycle a fraction of the maximum storage capacity to
705 which they are entitled. For example, according to the data supplied in response to
706 Data Request IIEC 1.11 (see Appendix A), the non-Customer Select transportation
707 customers cycled only 21.2 Bcf, not the 35 Bcf that Mr. Mudra assumes for his
708 calculations. So even if these customers do cycle another 3.75 Bcf, as Mr. Mudra
709 fears, they would still be cycling 10 Bcf (21.2 plus 3.75 minus 35) less than they are
710 entitled to, even under Mr. Mudra's calculations. Finally, Mr. Mudra forgets that Nicor

711 is, on and of its own accord, cycling approximately 10 Bcf less than its maximum
712 storage capacity.

713 **The Issue of Nicor's Proposal to Put New Restrictions**
714 **on the Nomination Rights of Transportation Customers**

715 **Q WHAT IS THIS ISSUE ABOUT?**

716 A In his direct testimony, Nicor witness Bartlett proposed to curtail the amount of gas
717 that transportation customers can nominate for the months March, April, July, August,
718 September and October. Because a transportation customer is imputed, under
719 Nicor's tariffs, to inject the positive difference between its daily nomination and its
720 daily usage, in essence Mr. Bartlett was proposing to restrict the amount of gas that
721 transportation customers taking storage service can bank in Nicor's storage fields.

722 I will not repeat the details of Mr. Bartlett's proposals here because they were
723 explained in detail in both his direct testimony (Nicor Ex. 4.0, pages 24 through 29)
724 and my own direct testimony.(IIEC Ex. 1.0, pages 16 through 21.) Suffice it to say
725 that I testified that Mr. Bartlett had not shown that these new restrictions are
726 necessary and noted the Commission's finding in the previous case about
727 unnecessarily limiting the ability of transportation customers to utilize the storage that
728 they select and pay for. Staff witness Sackett was similarly unpersuaded of the need
729 for these new restrictions.

730 **Q HOW DID MR. BARTLETT RESPOND TO YOUR OBJECTIONS IN HIS REBUTTAL**
731 **TESTIMONY, NICOR EXHIBIT 19.0?**

732 A Mr. Bartlett states that his proposed changes are "expected to reduce the additional
733 costs which Sales customers are forced to incur due to transport customers storage

734 usage patterns.” He then produced Nicor Exhibit 19.3, which purports to show that
735 the transportation customer usage patterns in the twelve month period covered by
736 this “analysis” cost the Sales customers a total of \$12 million.

737 **Q DOES NICOR EXHIBIT 19.3 SHOW WHY THE PROPOSED NOMINATION**
738 **RESTRICTIONS ARE NEEDED?**

739 A No. In the first place, his proposed new restrictions only pertain to the months of
740 March, April, July, August, September and October. The alleged impact in those
741 months is only \$4 million, not \$12 million. But even more importantly, Mr. Bartlett
742 does not show how his proposed new restrictions would resolve the alleged
743 “problem.” In fact, when asked, in Data Request IIEC 6.13 (see Appendix A),
744 specifically how the proposed new restrictions would change the storage activity
745 (shown in Column C of his exhibit), Nicor objected because it called for speculation.
746 If Nicor refuses to speculate how the situation would change with his new restrictions,
747 the Commission should not speculate whether his proposed new restrictions will solve
748 a problem – especially when the problem has not even been demonstrated to exist.
749 Nicor went on to state that:

750 Nicor Gas does not know how Transportation customers will in fact
751 actually adjust their pattern of storage utilization if the Company's
752 proposals in this proceeding are adopted.

753 Consequently the Company's proposals should be rejected.

754 **Q NEVERTHELESS, DO YOU AGREE THAT NICOR EXHIBIT 19.3 DEMONSTRATES**
755 **THAT TRANSPORTATION CUSTOMERS' STORAGE PATTERNS ARE COSTING**
756 **THE SALES CUSTOMER ADDITIONAL GAS COSTS?**

757 A No. In the first place, this exhibit is premised on the assumption that if Nicor must

758 deviate from its planned withdrawals or injections, the variance must be made up at
759 the difference between the Chicago City Gate price as published in Platt's for that day
760 and the settlement price for the NYMEX futures price for the prompt month. (The
761 prompt month is the nearest month of delivery for which the futures month is traded.)
762 However, Mr. Bartlett has provided absolutely no evidence that those two
763 benchmarks determine the relevant prices for planned versus unplanned purchases
764 or sales. In fact, in response to Data Request IIEC 6.08 (see Appendix A), Nicor
765 acknowledged that in the period covered by the exhibit, it had not purchased any
766 prompt month gas at the NYMEX futures price. Thus the extra "costs" are premised
767 on a false assumption, namely that the futures price form the basis for Nicor's
768 planned purchases.

769 In the second place, Nicor's actual storage activity deviates from plan for
770 reasons other than the storage activity of transportation customers.

771 In the third place, the entire analysis focuses only on daily arbitrage.
772 However, storage is much more valuable for the ability to take advantage of
773 seasonal differentials. For example, Mr. Bartlett's Nicor Exhibit 19.3 shows that, as a
774 result of this daily arbitrage, the transportation customers' deviation from plan during
775 the month of December allegedly cost Sales customers an extra \$2.6 million.
776 However, a closer look shows that during this month, transportation customers had
777 net withdrawals from storage of only 457,126 MMBtu, when they were actually
778 entitled to withdraw 5,769,917 MMBtu. Thus, transportation customers did not use
779 approximately 5.3 million MMBtu to which they were entitled, even by Nicor's
780 calculation. If we accept Mr. Mudra's estimate that there is generally a \$1.00 to \$1.50
781 per MMBtu seasonal differential, the transportation customers' under utilization of the

782 storage saved Sales customers between \$5.3 million and \$8.0 million, or far more
783 than the alleged "cost" that Mr. Bartlett claims for that month.

784 **Q DOES NICOR EXHIBIT 19.3 SHOW THAT TRANSPORTATION CUSTOMERS USE**
785 **LESS STORAGE THAN THEY PURCHASE AND PAY FOR?**

786 A Yes. Even Mr. Bartlett concedes that Nicor Exhibit 19.3 shows Transportation
787 customers seasonal cycling of their inventory is much less than their allocated
788 capacity. (Response to Data Request IIEC 6.21, see Appendix A)

789 **Q IN RESPONSE TO DATA REQUEST IIEC 6.13 (SEE APPENDIX A),**
790 **MR. BARTLETT DOES SAY THAT, ALTHOUGH HE DOES NOT KNOW HOW HIS**
791 **PROPOSED RESTRICTIONS WILL CHANGE STORAGE UTILIZATION BY**
792 **TRANSPORTATION CUSTOMERS, HE "ANTICIPATES" THERE WILL BE A**
793 **REDUCTION OF OCCURRENCES WHEN TRANSPORTATION CUSTOMERS ARE**
794 **INJECTING DURING THE WITHDRAWAL SEASON OR WITHDRAWING DURING**
795 **THE INJECTION SEASON. PLEASE RESPOND.**

796 A I find that statement to be quite puzzling. Nicor has always taken the position that the
797 capabilities of its storage fields are finite, and so any storage rights that are given to
798 the transportation customers must necessarily reduce the rights of sales customers.
799 Of course, to a certain extent that is true, which is why those capabilities must be
800 fairly apportioned between the sales customers and the transportation customers.
801 Both groups of customers must be treated equitably. However, in the comment that
802 you cited in this question, Mr. Bartlett seems to be complaining that transportation
803 customers are acting in a **countercyclical** pattern, that is when their storage activity

804 runs counter to how Nicor wants to use the storage fields. I find that comment to be
805 quite odd.

806 **Q WHAT IS SO ODD ABOUT THAT STATEMENT?**

807 A I find it odd because when transportation customers' use of storage runs counter to
808 Nicor's intended storage activity, that actually **enhances** the capabilities of the field.
809 Let us suppose that, for example, the storage field is capable of cycling 100 MCF.
810 Now suppose that you sell the right of 20 MCF to a third party, but that party wants to
811 inject gas when you want to withdraw and withdraw when you want to inject. In that
812 case, during the injection season you can actually inject 120 MCF. That is because
813 you can purchase 120 MCF, and "loan", so to speak the extra 20 MCF to the third
814 party who is short (because the third party is using more gas than it is nominating).
815 Similarly, in the withdrawal season you can supply the sales customers with 120 MCF
816 because the third party is now bringing in 20 more MCF than it is using. It is difficult
817 to see why Mr. Mudra would want to squelch a behavior pattern that enhances the
818 capacity of Nicor to act on behalf of its sales customers.

819 **Q ON PAGE 19 OF HIS REBUTTAL TESTIMONY, MR. BARTLETT STATES THAT**
820 **YOU HAVE CONTRADICTED YOURSELF. DO YOU AGREE THAT YOU HAVE**
821 **CONTRADICTED YOURSELF?**

822 A No. Mr. Bartlett believes that because I take the position that restricting the flexibility
823 of transportation customers to fully utilize their storage must necessarily increase the
824 cost to those transportation customers, this contradicts my statement that Nicor had
825 failed to show an adverse cost impact to sales customers that is rectified by the new
826 restrictions. Those statements are not at all contradictory. Nicor does not deny the

827 first statement. And as for the second statement, as my critique of Nicor's
828 Exhibit 19.3 as well as Nicor's response to Data Request IIEC 6.13 given in my last
829 answer, show, Nicor still has not established that there is an adverse impact to Sales
830 customers that requires the imposition of new restrictions to transportation customers.
831 Consequently, I still maintain that the new proposed restrictions on the MDN be
832 rejected.

833 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

834 **A Yes.**

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**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

Results of Nicor COSS with Storage Losses Corrected
(Dollars in Thousands)

Line No.	Description (A)	Present Rates			Nicor Proposed Rates		
		ROR (B)	Indexed ROR (C)	Subsidy (D)	ROR (E)	Indexed ROR (F)	Subsidy (G)
Residential Rates:							
1	Rate 1 - Residential	-1.41%	-71	\$ (34,460)	6.80%	88	\$ (13,621)
Nonresidential Rates:							
2	Rate 4 - General Gas Service	10.31%	520	26,557	11.22%	145	15,841
3	Rate 5 - Seasonal Use Service	12.51%	631	62	16.36%	211	73
4	Rate 6 - Large General Service	18.88%	952	20	25.16%	325	29
5	Rate 7 - Large-Volume Service	0.00%	-	-	0.00%	-	-
6	Rate 17/19 - Contract Service	5.68%	287	-	5.68%	73	(989)
7	Rate 74 - General Transportation	6.37%	321	6,760	6.01%	78	(3,821)
8	Rate 75 - Seasonal Use Transportation	-9.59%	-484	(194)	-4.09%	-53	(284)
9	Rate 76 - Large General Transportation	5.04%	254	1,312	10.19%	132	1,503
10	Rate 77 - Large Volume Transportation	1.82%	92	(57)	10.32%	133	1,269
11	Subtotal - Nonresidential	8.22%	414	\$ 34,460	9.37%	121	\$ 13,621
12	Total - Residential & Nonresidential	1.98%	100	0	7.74%	100	0

Note: Negative subsidies indicate below cost of service.
Positive subsidies indicate above cost of service.

**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

**Indicated Rates at 97.5% of Cost
Based on COSS Shown on IIEC Exhibit 2.1**

(Dollars in Thousands)

Line No.	Description (A)	Indicated Rates at 97.5% of Cost			
		Current Revenue (B)	Proposed Revenue (C)	Revenue Change (D)	Percent Revenue Change (E)
Residential Rates:					
1	Rate 1 - Residential	\$ 354,002	\$ 467,812	\$ 113,810	32.1%
Nonresidential Rates:					
2	Rate 4 - General Gas Service	121,463	140,086	18,623	15.3%
3	Rate 5 - Seasonal Use Service	189	254	65	34.5%
4	Rate 6 - Large General Service	49	70	21	42.5%
5	Rate 7 - Large-Volume Service	-	-	-	0.0%
6	Rate 17/19 - Contract Service	9,234	9,234	-	0.0%
7	Rate 74 - General Transportation	42,744	44,129	1,385	3.2%
8	Rate 75 - Seasonal Use Transportation	147	182	35	23.7%
9	Rate 76 - Large General Transportation	10,498	13,851	3,353	31.9%
10	Rate 77 - Large Volume Transportation	7,034	10,846	3,812	54.2%
11	Subtotal - Nonresidential	\$ 191,358	\$ 218,652	\$ 27,294	14.3%
12	Total - Residential & Nonresidential	\$ 545,360	\$ 686,464	\$ 141,104	25.9%

Note: Indicated Rates reflect removal of storage losses associated with transportation customers.

**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

**Indicated Rates at 100% of Cost
Based on COSS Shown on IIEC Exhibit 2.1**
(Dollars in Thousands)

Line No.	Description (A)	Indicated Rates at 100% of Cost			
		Current Revenue (B)	Proposed Revenue (C)	Revenue Change (D)	Percent Revenue Change (E)
Residential Rates:					
1	Rate 1 - Residential	\$ 354,002	\$ 479,807	\$ 125,805	35.5%
Nonresidential Rates:					
2	Rate 4 - General Gas Service	121,463	123,608	2,145	1.8%
3	Rate 5 - Seasonal Use Service	189	180	(9)	-4.8%
4	Rate 6 - Large General Service	49	40	(9)	-18.9%
5	Rate 7 - Large-Volume Service	-	-	-	0.0%
6	Rate 17/19 - Contract Service	9,234	9,234	-	0.0%
7	Rate 74 - General Transportation	42,744	49,851	7,107	16.6%
8	Rate 75 - Seasonal Use Transportation	147	492	345	235.0%
9	Rate 76 - Large General Transportation	10,498	13,055	2,557	24.4%
10	Rate 77 - Large Volume Transportation	7,034	10,197	3,163	45.0%
11	Subtotal - Nonresidential	\$ 191,358	\$ 206,657	\$ 15,299	8.0%
12	Total - Residential & Nonresidential	\$ 545,360	\$ 686,464	\$ 141,104	25.9%

Note: Indicated Rates reflect removal of storage losses associated with transportation customers.

**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

**Results of Nicor COSS with Storage Losses Corrected using the Average and Peak Method
and MDM Study used for All Mains**
(Dollars in Thousands)

Line No.	Description (A)	Present Rates			Nicor Proposed Rates		
		ROR (B)	Indexed ROR (C)	Subsidy (D)	ROR (E)	Indexed ROR (F)	Subsidy (G)
Residential Rates:							
1	Rate 1 - Residential	-1.95%	-104	\$ (40,076)	6.13%	79	\$ (24,318)
Nonresidential Rates:							
2	Rate 4 - General Gas Service	10.81%	579	28,010	11.61%	150	17,383
3	Rate 5 - Seasonal Use Service	11.61%	622	59	15.46%	200	67
4	Rate 6 - Large General Service	34.03%	1,823	26	40.79%	527	39
5	Rate 7 - Large-Volume Service	-	-	-	-	-	-
6	Rate 17/19 - Contract Service	14.89%	798	-	14.89%	192	2,449
7	Rate 74 - General Transportation	7.00%	375	7,699	6.46%	83	(2,770)
8	Rate 75 - Seasonal Use Transportation	-9.66%	-517	(195)	-4.19%	-54	(290)
9	Rate 76 - Large General Transportation	9.54%	511	2,737	14.68%	190	3,550
10	Rate 77 - Large Volume Transportation	8.78%	470	1,740	18.52%	239	3,890
11	Subtotal - Nonresidential	9.48%	508	\$ 40,076	10.82%	140	\$ 24,318
12	Total - Residential & Nonresidential	1.87%	100	0	7.74%	100	0

Note: Negative subsidies indicate below cost of service.

Positive subsidies indicate above cost of service.

NICOR proposes to keep Rate 17/19 - Contract Services at present rates.

**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

**Indicated Rates at 97.5% of Cost
Based on COSS Shown on IIEC Exhibit 2.4**
(Dollars in Thousands)

Line No.	Description	Indicated Rates at 97.5% of Cost			
		Current Revenue (B)	Proposed Revenue (C)	Revenue Change (D)	Percent Revenue Change (E)
Residential Rates:					
1	Rate 1 - Residential	\$ 354,002	\$ 475,894	\$ 121,892	34.4%
Nonresidential Rates:					
2	Rate 4 - General Gas Service	121,463	138,227	16,764	13.8%
3	Rate 5 - Seasonal Use Service	189	260	71	37.4%
4	Rate 6 - Large General Service	49	60	11	23.4%
5	Rate 7 - Large-Volume Service	-	-	-	0.0%
6	Rate 17/19 - Contract Service	9,234	9,234	-	0.0%
7	Rate 74 - General Transportation	42,744	42,646	(98)	-0.2%
8	Rate 75 - Seasonal Use Transportation	147	178	31	21.1%
9	Rate 76 - Large General Transportation	10,498	11,761	1,263	12.0%
10	Rate 77 - Large Volume Transportation	7,034	8,205	1,171	16.6%
11	Subtotal - Nonresidential	\$ 191,358	\$ 210,570	\$ 19,212	10.0%
12	Total - Residential & Nonresidential	\$ 545,360	\$ 686,464	\$ 141,104	25.9%

Note: Indicated Rates reflect removal of storage losses associated with transportation customers and MDM study used for all mains.

**Northern Illinois Gas Company
d/b/a Nicor Gas Company
2009 Test Year**

**IIEC Proposed Rates at 100% of Cost
Based on COSS Shown on IIEC Exhibit 2.4**
(Dollars in Thousands)

Line No.	Description	IIEC Proposed Rates at 100% of Cost			
		Current Revenue (B)	Proposed Revenue (C)	Revenue Change (D)	Percent Revenue Change (E)
Residential Rates:					
1	Rate 1 - Residential	\$ 354,002	\$ 488,096	\$ 134,094	37.9%
Nonresidential Rates:					
2	Rate 4 - General Gas Service	121,463	121,464	1	0.0%
3	Rate 5 - Seasonal Use Service	189	184	(5)	-2.6%
4	Rate 6 - Large General Service	49	30	(19)	-39.0%
5	Rate 7 - Large-Volume Service	-	-	-	0.0%
6	Rate 17/19 - Contract Service	9,234	9,234	-	0.0%
7	Rate 74 - General Transportation	42,744	48,466	5,722	13.4%
8	Rate 75 - Seasonal Use Transportation	147	494	347	236.0%
9	Rate 76 - Large General Transportation	10,498	10,951	453	4.3%
10	Rate 77 - Large Volume Transportation	7,034	7,545	511	7.3%
11	Subtotal - Nonresidential	\$ 191,358	\$ 198,368	\$ 7,010	3.7%
12	Total - Residential & Nonresidential	\$ 545,360	\$ 686,464	\$ 141,104	25.9%

Note: IIEC Proposed Rates reflect removal of storage losses associated with transportation customers and MDM study used for all mains.

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

NORTHERN ILLINOIS GAS COMPANY)
D/B/A NICOR GAS COMPANY)
PROPOSED GENERAL INCREASE IN)
NATURAL GAS RATES)

DOCKET NO. 08-0363

VERIFICATION

STATE OF MISSOURI :
: SS
COUNTY OF ST. LOUIS :

I, Alan Rosenberg, a Consultant and Managing Principal of Brubaker & Associates, Inc., affirm under penalties of perjury that the information contained in my rebuttal testimony (IIEC Exhibit 2.0) and exhibits (IIEC Exhibits 2.1, 2.2, 2.3, 2.4, 2.5 and 2.6) in Nicor Docket No. 08-0363 is true and correct to the best of my knowledge, information and belief.



Alan Rosenberg

SUBSCRIBED AND SWORN to before me
on this 23rd day of October, 2008.



NOTARY PUBLIC

