

REBUTTAL TESTIMONY

of

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Northern Illinois Gas Company

d/b/a Nicor Gas Company

Proposed General Increase in Gas Rates

Docket No. 08-0363

October 24, 2008

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1 **I. Witness Qualifications**

2 **Q. State your name and business address.**

3 A. David Sackett, Illinois Commerce Commission, 527 East Capitol Avenue,
4 Springfield, Illinois, 62701.

5
6 **Q. Are you the same David Sackett who previously testified in this proceeding?**

7 A. Yes.

8
9 **II. Purpose of Testimony and Background Information**

10 **Q. What is the subject matter of your rebuttal testimony?**

11 A. The purpose of this testimony is to clarify the issues and Staff's positions on
12 those issues relating to Nicor Gas' provision of transportation service. This
13 testimony concerns Northern Illinois Gas Company d/b/a Nicor Gas Company
14 ("Nicor Gas" or "Company") and its Proposed General Increase in Gas Rates. I
15 discuss changes to transportation service that Nicor Gas claims that it needs to
16 make because it alleges the decisions of transportation customers often run
17 counter to the optimal operation of its system. Specifically, Nicor Gas has
18 proposed to reduce the Maximum Daily Nomination ("MDN") that a customer
19 receives for the months of July – October if it does not cycle all of its gas from
20 storage, and to reduce the MDN for the months of March and April. In addition,
21 Nicor Gas has proposed to change its calculation methodology for its Storage
22 Banking Service ("SBS") entitlement, SBS charge and the Storage Withdrawal
23 Factor ("SWF"). I am also going to respond to the direct testimony of interveners

24 in this case. Specifically, I address the testimony of Illinois Industrial Energy
25 Consumers (“IIEC”) witness Dr. Alan Rosenberg (IIEC Ex. 1.0), Constellation
26 NewEnergy – Gas Division (“CNE”) witnesses Ms. Darcy Fabrizius (CNE Ex. 1.0)
27 and Ms. Lisa Rozmialski (CNE Ex. 2.0), Vanguard Energy Services (“VES”)
28 witness Mr. Neil Anderson (VES Ex. 1.0), and Customer Select Gas Suppliers
29 (“CSGS”) witness Mr. James L. Crist (CSGS Ex. 1.0). I also discuss affiliate
30 transaction issues raised by Coalition for Equal Access and Fair Utility Rates
31 (“CEAFUR”) witness Mr. Arnold Schramel, which are of concern.

32

33 **III. Summary of Conclusions and Recommendations**

34 **Q. Please summarize your conclusions and recommendations.**

35 A. I have several general conclusions. I conclude that some of the changes that
36 Nicor Gas proposes to make in transportation services reduce the value of these
37 services to transportation customers. I conclude that Nicor Gas’ arguments
38 regarding the cost to sales customers from transportation customers and the
39 capacity comparisons are not supported in its testimony and that the Commission
40 should reject these proposed changes. I have sixteen recommendations for this
41 case:

42 1. The reductions in Maximum Daily Nominations (“MDN”) in July through October
43 should be rejected by the Commission. The Commission addressed this issue in
44 the Company’s last rate case Docket No. 04-0779 (“04-0779”), and the Company
45 has provided no new evidence that warrants changing the earlier decision. In fact,
46 the only *new* support provided by Nicor Gas is the argument that decreasing

- 47 injection rights during July through October may reduce the need for Nicor Gas to
48 issue delivery caps on interstate pipeline; Staff and CNE have pointed out that
49 these caps are not occurring during the affected months.
- 50 2. The proposed reductions in MDN in March and April should be rejected by the
51 Commission. The evidence provided by Nicor Gas does not provide compelling
52 proof that transportation customers' actions impose an economic cost on sales
53 customers. Nor is there support provided by Nicor Gas for the argument that
54 decreasing nomination rights during March and April may reduce the need for Nicor
55 Gas to issue delivery caps on interstate pipeline; Staff and CNE have pointed out
56 that there have not been any caps in the past 16 months.
- 57 3. The definition of the term MDN in the tariff should be expanded. Nicor Gas should
58 change the tariff heading from "Daily Nomination Limits" to "Maximum Daily
59 Nomination" to clarify that all the limits contained in that section are in fact MDNs.
- 60 4. Nicor Gas' proposal to change the capacity with which it calculates its Storage
61 Banking Service ("SBS") entitlement, SBS charge, and the Storage Withdrawal
62 Factor ("SWF") should be rejected.
- 63 5. The increases in the cost of service study ("ECOSS"), except the sales customers'
64 share of gas storage losses, should be incorporated into the SBS charge
65 calculation.
- 66 6. The Commission should a thorough study to evaluate how Nicor Gas utilizes its
67 storage fields. Nicor Gas is not using these fields to their rated capacity of 150 Bcf.
68 The study should consider both economic and operational costs and benefits to the

- 69 Company and to sales customers. Additionally, I recommend that a further
70 investigation of this issue be conducted in the next PGA case.
- 71 7. The sales customers' share of gas storage losses should not be allocated in the
72 ECOSS to the base rates of any classes of transportation customers.
- 73 8. Nicor Gas should develop a new methodology to allocate gas storage losses to
74 sales customers based on relative net *injections* during injection months
- 75 9. Nicor Gas should recover the Unaccounted-For Gas Adjustment ("UFGA") from
76 Hub deliveries. The UFGA should be recalculated to include estimated Hub
77 deliveries in the denominator. This lowers the UFGA, but it would recover storage
78 and system losses from more customers.
- 79 10. Nicor Gas should implement a pilot program to provide the evening nomination (6
80 PM) on a firm basis and the Intra-day 1 nomination (10 AM) on a best-efforts basis
81 to allow a determination of the effects and feasibility of this service. This pilot
82 program would provide a measured step toward balancing the flexibility clearly
83 enjoyed by Nicor Gas while not burdening Nicor Gas with an unworkable solution
84 and would enable a more thorough analysis in a subsequent rate proceeding. In its
85 surrebuttal, Nicor Gas should provide a cost estimate of providing this increased
86 service.
- 87 11. Nicor Gas should provide for trading of stored gas under the same circumstances
88 that the Commission approved for Peoples Gas and North Shore Gas in Docket
89 Nos. 07-0240/07-0241. (Cons.)
- 90 12. The Maximum Daily Contract Quantity ("MDCQ") calculation which determines the
91 storage and demand charges for larger customers should include data from the

92 most recent heating season along with any other tariff changes that needed to
93 accommodate this. The entire year (May through April) should be used to account
94 for those customers using very little gas during the winter.

95 13. Super-pooling, whereby all of a marketer's groups are pooled into one large pool to
96 take advantage of diversity should be allowed in the determination of Critical Day
97 ("CD") penalties. If the Commission allows Nicor Gas' proposed MDN reductions
98 are approved, i.e., the cycling target, the provision of super-pooling is needed for
99 consistency.

100 14. The seasonal usage annual maximum should be increased from 250,000 therms to
101 1.5 million therms.

102 15. The Memorandum of Understanding ("MOU") between Nicor Gas and CSGS
103 should be approved by the Commission as regards the Customer Select
104 administrative fee, the carrying cost of working gas and access to Nicor Gas
105 assets.

106 16. Nicor Gas' operating agreements with its affiliates should be reopened as
107 recommended by Staff witness Hathhorn. (ICC Staff Exhibit 15.0)

108

109 **IV. Tariff Revisions Affecting Transportation Customers**

110 **Q. Please summarize Nicor Gas' proposed revisions to its transportation**
111 **services.**

112 A. Nicor Gas has proposed to make certain changes to its rates and services for
113 transportation customers, as provided for in Rates 74, 75, 76, and 77 and, through
114 Rider 25, Rates 4, 5, 6, and 7. Notably, those changes are: a reduction to the

115 Maximum Daily Nomination (“MDN”) for the months of July – October and for the
116 months of March and April for customers who do not completely cycle all of their
117 gas from storage. Nicor Gas also proposes to change how it calculates its Storage
118 Banking Service (“SBS”) entitlement, SBS charge, and the Storage Withdrawal
119 Factor (“SWF”) by changing the capacity being divided from the total non-coincident
120 working gas capacity ordered by the Commission in the last rate case of 149.7 Bcf
121 to Nicor Gas’ targeted (or planned) maximum working gas inventory which it claims
122 is the operationally available capacity of 134.6 Bcf.

123

124 **A. Proposed reductions in nomination rights**

125 **Q. What changes to Maximum Daily Nomination (“MDN”) has Nicor Gas**
126 **proposed?**

127 A. Nicor Gas has proposed to change the MDN for its transportation customers in two
128 different periods for two different reasons. These reductions would reduce
129 nominating flexibility for transportation customers. Nicor Gas witness Bartlett bases
130 his rebuttal case on the argument that the actions of transportation customers
131 negatively affect sales customers by raising their gas costs. (Co. Ex.19.0, pp.14-15)

132

133 **Q. How did Nicor Gas justify its assertions?**

134 A. Nicor Gas Witness Bartlett sponsors Co. Exhibit 19.3 that purports to demonstrate
135 the cost to sales customers when transportation customers use their flexibility to not
136 follow Nicor Gas’ operational cycling requirements. Nicor Gas asserts that there is
137 a balance that must be reached between the flexibility given to transportation

138 customers and the flexibility that the LDC has to balance the system and secure the
139 lowest prices for sales customers. Nicor Gas further asserts that the proper
140 balance has not been achieved and its proposals will correct that at this time. (Co.
141 Ex. 19.0, p. 16)

142

143 **Q. What concerns do you have with regard to Co. Exhibit 19.3?**

144 A. Mr. Bartlett's Exhibit 19.3 attempts to put a dollar estimate on the lost flexibility that
145 sales customers allegedly incur when transportation customers use their storage
146 assets differently than is optimal. The analysis is based on Nicor Gas' storage
147 cycling plan which is a daily estimate of what injections and withdrawals might be
148 like during the cycle. However, the exhibit fails to show what he claims that it
149 shows. It is based on faulty analysis and assumptions and fails to account for the
150 actions of sales customers. For example, Nicor Gas' analysis looks at deviations of
151 transportation customers' portion of a plan formulated by Nicor Gas before the start
152 of the withdrawal season. Actual field withdrawals properly deviate from scheduled
153 withdrawals as the Company reacts to weather and other demand conditions over
154 the winter. Withdrawals (or gas use) of sales and transportation customers both
155 deviate from the plan, often in the same direction. I have four criticisms of the
156 analysis as enumerated below.

157 1. The plan is formulated by Nicor Gas and is not shared with transportation
158 customers. Mr. Bartlett's analysis holds transportation customers to a standard that
159 they do not know, are not required by any tariff to maintain, and that somehow
160 transportation customers have a part of this plan that is theirs. The analysis

161 appears to assume that deviations from this plan are deliberate and made for
162 economic reasons as opposed to many exogenous variables. Therefore, the
163 expectation is that there must be a rigid adherence to the plan.

164 2. However, the plan is purely hypothetical. It is not a reasonable estimate of what is
165 expected. In addition, gas use or gas withdrawals within the plan are very volatile
166 from day-to-day, even erratic due to simulated peak days. This volatility projected
167 by the plan makes a daily comparison gas use/withdrawals projected by the plan
168 with actual gas use/withdrawals of little value.

169 3. Nicor Gas does not even adhere to the plan itself. It is clear from Co. Ex. 19.3 that
170 Nicor Gas does not follow the plan on a daily basis. However, Mr. Bartlett has
171 made no effort to compare Nicor Gas' deviations from the plan for sales customers
172 and the Hub on a similar basis (or in a similar manner).

173 4. Deviations from the plan on the part of transportation customers do not necessarily
174 mean that Nicor Gas is precluded from making purchases, i.e., it may be that
175 Nicor Gas would have made no purchases at the daily price regardless of the
176 actions of the transportation customers. The majority of Nicor Gas purchase
177 volumes are determined before the start of the month. According to the Company
178 response to Data Request ("DR") DAS 6.11, "the daily purchase requirements are
179 driven primarily by operational requirements." So Nicor Gas purchases would not
180 necessarily exactly precluded by transportation customers' activity.

181

182 **Q. Did you consider the cost impacts for sales customers that were provided in**
183 **Mr. Bartlett's response to Staff DR 4.02 for your direct testimony?**

184 A. Yes. Upon receipt, I reviewed the response briefly and determined it was flawed. I
185 was unable to incorporate a thorough review of the information provided in
186 response to DR DAS 4.02 in my direct testimony because it was received from the
187 Company on August 26, 2008, just *one day* before my direct testimony was due.
188 (Co. Response to Staff DR 7.05) A thorough review of his analysis does not cause
189 me to change my conclusions from my direct testimony.

190

191 **Q. Do you have any other concerns with regard to Nicor Gas' rebuttal testimony**
192 **on the reduction of the MDN for transportation customers?**

193 A. Yes. Mr. Bartlett states that none of the Interveners or Staff has shown that the
194 reduction in MDN would cause a detriment to transportation customers. (Co. Ex.
195 19.0, p. 20) Nicor Gas' own calculations clearly show that transportation customers
196 lose flexibility. Nicor Gas response to DR DAS 1.12 shows transportation
197 customers would average a 23% loss in injection rights and its response to DR
198 DAS 1.13 shows an even larger average loss of 69% in nomination rights during
199 March and 41% in April. The loss of rights is a detriment to transportation
200 customers. The Commission is clear that, all other things being equal, it wants to
201 *expand* flexibility for transportation customers. (Order, Docket No. 04-0779,
202 September 20, 2005, p.131)

203

204 **1. Reduction of Maximum Daily Nominations (“MDN”) in the months of July**
205 **through October.**

206 **Q. What did Nicor Gas propose with regard to the MDN in the months of July**
207 **through August?**

208 A. Nicor Gas proposed to reduce MDN in these months proportionally to a customer’s
209 remaining SBS inventory at the end of April. Under Nicor Gas’ proposal, for each
210 percentage of its storage bank that is not empty on April 30th, the customer loses
211 one percent of its storage injection rights during July through October.

212

213 **Q. Is this the same basic proposal Nicor Gas made in its last rate case?**

214 A. Yes. Nicor Gas proposed a similar cycling incentive in the previous case.
215 Attachment A is the two tariff sheets that Nicor Gas proposed in 04-0779. Nicor
216 Gas’s current proposal, while not defined as a “cycling requirement” in the tariff, is
217 more of a requirement as was proposed in the last rate case. The Commission
218 should reject it in the instant case as well.

219

220 **Q. How does the current proposal differ from Nicor Gas’ proposal in 04-0779?**

221 A. There are three differences between the two proposals: the date of calculation, the
222 date of effect and the grace window that applied in the previous proposal.

223

224

	Calculation Date	Months affected	Grace Window	Target
04-0779	April 1 st	May - October	10%	90%
08-0363	April 30 th	July - October	None	100%

225

Table 1

226

Q. What differences between the proposals did Nicor Gas address?

227

A. The date of calculation is now April 30th instead of April 1st. Also, the date effective for this is now only July through October because Nicor Gas claims that it cannot provide accurate information to those customers in time for them to act accordingly for the months of May and June. (Co. Ex. 4 0, p. 26) This later date provides a benefit to transportation customers as they are not subject to penalties until July rather than May. However, this should not imply that this proposal is not more stringent.

228

229

230

231

232

233

234

235

Q. Which differences between the proposals did Nicor Gas *not* address?

236

A. The Company is proposing a more stringently applied penalty than the one rejected in the last case. Nicor Gas does not now call its current proposal a cycling requirement, but it is basically the same reductions in MDN as that rate case, only it has now eliminated the 10% grace window. In 04-0779, Nicor Gas proposed that the injection rights should be tied to a “target” for customers to cycle 90% of their SBS capacity. That “target” has increased to 100% in the current proposal. Now

237

238

239

240

241

242 Nicor Gas has proposed the same loss of injection rights but no grace window. The
 243 Company has failed to show why the Commission should approve a *more*
 244 *restrictive* tariff provision than it properly rejected in the last case.

If banks were cycled down to this level...	Nicor Proposed 04-0779 storage injection rights would be...	Approved 04-0779 storage injection rights would be...	Nicor Proposed 08-0363 storage injection rights would be...	Staff <i>alternative</i> proposal 08-0363 storage injection rights would be...
5 %	100%	100%	95%	100%
25 %	75%	100%	75%	87.5%%

Table 2

245

246

247 **Q. What do you recommend with regard to reduction in MDN for July through**
 248 **August?**

249 A. I continue to recommend that these proposed changes be rejected by the
 250 Commission. As is discussed above, the Commission already ruled on this issue in
 251 04-0779, and the Company has provided no evidence that warrants changing the
 252 earlier decision. In fact, the only new support provided by Nicor Gas is the
 253 argument that decreasing injection rights during July through October may reduce
 254 the need for Nicor Gas to issue delivery caps on interstate pipeline; Staff and CNE

255 have pointed out that these caps are not even happening during the affected
256 months.

257

258 **Q. What do you recommend with regard to reduction in MDN for July through**
259 **August if the Commission finds Nicor Gas' testimony about the need to fully**
260 **cycle and the cost to sales customers to be compelling?**

261 A. Rather than fully adopting Nicor Gas' proposal, I recommend that the Commission
262 take a measured step to address these problems. This is an issue where reducing
263 flexibility by too much is harmful to transportation service. Therefore, I recommend
264 that the reduction in injection rights proposed by Nicor Gas be cut in half and the
265 10% grace window that Nicor Gas proposed in the last case be applied before any
266 injections rights are lost (See Table 2 above).

267

268 **2. Reduction of Maximum Daily Nominations ("MDN") in the months of March**
269 **and April.**

270 **Q. What did Staff and Intervenors recommend in direct testimony with regard**
271 **to Nicor Gas' proposal to reduce MDN?**

272 A. Staff and Intervenors recommended that the Commission reject the proposal to
273 reduce MDN in March through April.

274

275 **Q. How did Nicor Gas respond to this recommendation?**

276 A. In its rebuttal testimony, the only objections were to my dismissal of the potential
277 reduction in the need for pipeline caps and the evidence provided in Co. Exhibit
278 19.3. I addressed that issue above. (Co. Ex. 19.0, pp.17-18)

279

280 **Q. What do you recommend with regard to reduction of MDN during the months**
281 **of March and April?**

282 A. I continue to recommend that these proposed changes be rejected by the
283 Commission. The evidence provided by Nicor Gas does not provide compelling
284 evidence that transportation customers' actions impose an economic cost to sales
285 customers. Nor is there substance to the argument provided by Nicor Gas that
286 decreasing nomination rights during March and April may reduce the need for Nicor
287 Gas to issue delivery caps on interstate pipelines; Staff and CNE have pointed out
288 that there have not been any caps in the past 16 months. (Staff Ex.11.0R, p. 10,
289 CNE Ex. 1.0, p. 30)

290

291 **Q. What do you recommend with regard to reduction in MDN for March and April**
292 **if the Commission finds Nicor Gas' testimony about the need to fully cycle**
293 **and the cost to sales customers is compelling?**

294 A. As above, I recommend that the Commission take a measured step to address
295 these problems. Again, this is an issue where reducing flexibility by too much is
296 harmful to transportation customers. Therefore, I recommend that the reduction in
297 nomination rights proposed by Nicor Gas be cut in half in the same manner as
298 proposed for the July-August period.

299

300 **Q. Did Nicor accept your recommendation that a single terminology was**
301 **appropriate to describe the maximum amount that Transportation**
302 **customers could nominate each day of the year?**

303 A. Yes. Nicor Gas witness Bartlett stated in his rebuttal testimony that Nicor Gas had
304 accepted my recommendation and that a single term, Maximum Daily Nomination
305 (“MDN”) would be reflected in the revised tariffs. He also stated that Mr. Mudra
306 would address this change in his rebuttal testimony (Co. Ex. 19.0, p. 21). However,
307 Mr. Mudra does not mention Nicor Gas’ acceptance, and the revised tariff sheets
308 do not include the change. Staff asked in DR DAS 7.08 whether this was an
309 oversight by the Company. Nicor Gas responded by stating that the Company was
310 also willing to change the tariff heading from “Daily Nomination Limits” to “Maximum
311 Daily Nomination” to clarify that all the limits contained in that section were in fact
312 MDNs. I find this acceptable.

313

314 **B. Calculations that Nicor Gas proposes to change from Docket No. 04-0779**

315 **Q. What changes has Nicor Gas effectively proposed to make to the Storage**
316 **Banking Service?**

317 A. There are three inter-related issues that revolve around the Storage Banking
318 calculations ordered in Nicor Gas’ last rate case, 04-0779. These calculations
319 include the Storage Banking Service (“SBS”) entitlement (how we divide the
320 capacity), the SBS Charge (what we charge per unit of that entitlement) and the

321 Storage Withdrawal Factor (“SWF”) (how much gas can be withdrawn on a
322 Critical Day (“CD”)).

323

324 **Q. What issue lies at the heart of the disagreement between Nicor Gas and Staff,**
325 **Intervenors and the Commission regarding the SBS?**

326 A. The central question that must be answered before any other issues can be
327 addressed is: what level of storage is to be allocated. In 04-0779, the
328 Commission chose the Company’s maximum non-coincident working gas in its
329 storage fields as the amount of storage. The maximum non-coincident working
330 gas in storage is the total of the maximum amounts of gas in storage in each of
331 its fields during the withdrawal season. In this proceeding, Nicor Gas implied that
332 it was not changing these calculations. (Co. Ex. 29.0, p. 37) However, rather
333 than changing the allocations as the previously approved formulas would imply,
334 Nicor Gas implicitly proposes to change the formula inputs as well as the
335 formulas themselves. This results in the storage allocation being smaller than
336 simply applying updated numbers to the formulas from the last rate case. The
337 effect of Nicor Gas’ changes in the formula is to maintain the present levels of
338 storage for transportation customers.

339

340 **Q. What value does Nicor Gas propose to use for the level of storage to be**
341 **allocated?**

342 A. Nicor Gas proposed using the operationally available capacity. Mr. Bartlett
343 states in rebuttal that

344 the various Intervenor appear to be confusing a rate making
345 concept (capacity) with the allocation of an operational capability. If
346 the 149.74 Bcf were to be used in calculating the SBS charges and
347 in the allocation of storage capacity, then Transportation customers
348 will receive a greater allocation of storage, and pay less per therm
349 for that capacity, since the actual annual operational capability of
350 the storage fields remains at the approximate 135 Bcf level.
351 (Co. Ex. 19.0, pp. 12-13)

352 According to Co. Response to DR DAS 6.07, Nicor Gas has been deliberately
353 decreasing the maximum level of its working gas inventory (Attachment G also
354 supports this).

355

356 **Q. What are the differences between the various proposals in the last rate case**
357 **and this case?**

358 A. The information shown below in Table 1 lists a comparison of the different
359 proposals in 04-0779 and in this case. Staff and Intervenor support the
360 Commission's non-coincident peak working gas number from the last rate case and
361 that those methods should be applied to the data in this case as well. Nicor Gas
362 argues that in each case, the Commission decided in error, and as such, the
363 methodology should be changed. (Co Response to DR DAS 7.18)

364

365

	04 Nicor Gas Proposed		04 ICC Approved		08 Nicor Gas Proposed		08 Staff / CNE Proposed	
SBS Allocation	Expected Cycling	120 Bcf	Peak non-coincident WG Cap.	149.7 Bcf	Operationally Available Capacity	134.6 Bcf	Peak non-coincident WG Cap.	149.7 Bcf
	Peak Design Day	5.3 Bcf	Peak Design Day	5.3 Bcf	Peak Design Day	4.9 Bcf	Peak Design Day	4.9 Bcf
SBS Charge	Storage costs minus top gas	\$52.5 million	Storage costs minus top gas	\$52.5 million	Storage costs minus top gas	\$67.9 million	Storage costs minus top gas	\$67.9 million
	Expected Cycling	120 Bcf	Peak non-coincident WG Cap.	149.7 Bcf	Operationally Available Capacity	134.6 Bcf	Peak non-coincident WG Cap.	149.7 Bcf
SWF	Est PD from storage	2.5 Bcf	Est PD from storage	2.5 Bcf	Est PD from storage	2.5 Bcf	Est PD from storage	2.5 Bcf
	Expected Cycling	120 Bcf	Peak non-coincident WG Cap.	149.7 Bcf	SBS Allocation	137.2 Bcf	Peak non-coincident WG Cap.	149.7 Bcf

Table 3

366

367

368 **Q. Why is Nicor Gas’ proposed “targeted” cycling storage capacity measure**
 369 **incorrect?**

370 A. In 04-0779, Nicor Gas specifically proposed to use 120 Bcf of “expected” cycling
 371 in all three of these calculations and in each case, the Commission rejected that
 372 proposal, choosing instead to use the non-coincident peak top gas. The
 373 Commission rejected Nicor Gas’ proposed SBS entitlement and SBS charge
 374 based on “expected” cycling of 120 Bcf because actual cycling for the test year of
 375 2005 was 124 Bcf (Co Response to DR DAS 6.08) and then it increased to 125 in
 376 2006, and then 130128 for 2007 (Co Response to DR IIEC 6.01) and 130 for
 377 2008. (Co Response to DR DAS 7.19, estimated). If the Commission had
 378 followed Nicor Gas’ proposal, it would have clearly under-estimated the amount
 379 of available storage and over-charged transportation customers. This illustrates

380 part of the problem with using an expected or targeted amount. It is dependent
381 arbitrary decisions on the part of the local distribution company (“LDC”).

382

383 **Q. How does Mr. Mudra calculate the SBS Capacity Allocation?**

384 A. To determine the SBS capacity allocation, Mr. Mudra multiplied 28, the number
385 of days of MDCQ currently allocated, by 4.9 Bcf, the peak design day, and he
386 arrived at 137.2 Bcf. (Nicor Gas Response to DR DAS 7.22f, provided as
387 Attachment B and Co Response to DR CNE 2.01 is provided as Attachment C)
388 He then divides the SBS Capacity Allocation by the peak design day of 4.9 to get
389 the SBS entitlement of 28 days. (Co Response to DR IIEC 2.02 Corrected is
390 provided as Attachment D) This is a circular calculation because (See Equation
391 1) he uses the SBS entitlement to calculate the SBS Capacity Allocation and
392 then uses the result to calculate the SBS entitlement. It is no surprise that he
393 gets 28 days.

$$28 * 4.9 Bcf = \frac{137.2 Bcf}{4.9 Bcf} = 28$$

394

Equation 1

395

396 **Q. Is Mr. Bartlett inconsistent as well?**

397 A. Yes. Mr. Bartlett’s position in this proceeding is partially inconsistent with his
398 position in the last rate case. Mr. Bartlett testified in 04-0779 that “the Company
399 maintains gas storage fields with a total capacity determined recently to be
400 466.266 Bcf. Of this amount, 149.740 Bcf is available to be filled by top gas, that
401 is, gas that can be injected and effectively recovered during a storage cycle.”

402 (Docket No. 04-0779, Co. Ex. 8.0, p. 38) He also argued that the expected
403 cycling amount was the appropriate.

404

405 **Q. What evidence did Mr. Bartlett provide in 04-0779 to show that 149.740 Bcf**
406 **was the correct capacity in his fields?**

407 A. To provide substance for that, Mr. Bartlett provided as an exhibit in that case an
408 engineering consultant's study performed in 2004 on Nicor Gas storage fields to
409 determine the actual amount of working gas (Docket No. 04-0779, Co. Ex. 8.3,
410 Summary is provided as Attachment E). Again, that total was shown to be
411 149.74 Bcf. In this case, Mr. Bartlett testified that Nicor Gas's total inventory
412 target has improved the field performance. (Co. Ex. 19.0, p.12) Considering
413 improved field performance combined with the decrease in the peak design day, I
414 find it hard to not to justify staying with the higher amount of storage capacity.

415

416 **Q. Is there evidence that the 134.6 Bcf is not even a maximum?**

417 A. Yes. In Attachment F, which is Nicor Gas' Response to DR 7.18, Mr. Mudra states
418 that the non- coincident level of 134.6 Bcf. working gas in storage for 2005 through
419 2007 was 138.9, 135.0 and 134. 1 which indicates that in two of those three years,
420 the capacity was above that amount operationally available. This is confirmed in
421 Attachment G.

422

423 **Q. Does Nicor Gas arrive at the correct capacity to use in this case?**

424 A. No. In the last rate case, Nicor Gas argued that the SBS charges and SBS
425 entitlement and rights should be based on expected usage not capacity. This
426 argument was properly rejected by the Commission. Nicor Gas began to make the
427 same argument in direct (Co. Ex. 14.0, p. 24) but revised its argument to a new
428 capacity-like concept (Attachment C and Co. Ex. 29, pp. 45-46). Without any
429 historical basis for it, Mr. Mudra has made a tautological computation with no
430 practical application. The Commission should not accept Nicor Gas' new argument
431 simply because Nicor Gas has changed from an expected cycling to a capacity
432 argument in this case.

433

434 **Q. What do you recommend if the Commission adopts Nicor Gas' measure of**
435 **the amount of storage to be divided in the calculation of the SBS entitlement?**

436 A. If the Commission is interested in finding a new capacity that is operationally
437 available, the amount that should be used is the average of the annual non-
438 coincident peaks from the last four years, which is 137.2 Bcf¹ This is the average of
439 the maximum physical top gas inventories for Nicor Gas' storage fields for the past
440 four years. Using this average eliminates the data from before the re-classification
441 of 7 Bcf of top gas to base gas that occurred in 2004. (See Attachment H)

442

¹ (This is not related to the same amount that was calculated using the method that Mr. Mudra used to determine the "Storage Banking Service Allocation").

443 **Q. What other general concerns do you have with regard to Nicor Gas' use of its**
444 **storage fields?**

445 A. Nicor Gas is not running its storage fields at their rated capacity of 150 Bcf, and as
446 a result, customers cannot benefit from the natural hedge that the 15 Bcf that Nicor
447 Gas intentionally elects not to cycle would provide. This 15 Bcf which Nicor Gas
448 chooses not to cycle is a much higher amount than the 5 Bcf amount that Nicor
449 Gas is concerned will be over-allocated to transportation and Customer Select
450 customers (See Co. Ex. 29.0, p. 40, l. 868).

451

452 **Q. Why are you concerned?**

453 A. Nicor Gas does not appear to take into consideration the economic benefits but
454 rather only operational issues ("performance") when it optimizes its fields. It should
455 instead optimize the fields for total costs and total benefits. Discounting the
456 economic value of the foregone capacity leads to under-utilization of the fields.

457

458 **Q. What do you recommend with regard to how Nicor Gas utilizes its storage**
459 **fields?**

460 A. I recommend that the Commission order Nicor Gas to conduct a thorough study to
461 evaluate the utilization of Nicor Gas storage fields from both an economic and a
462 performance perspective. Additionally, I recommend that an investigation of this
463 issue be conducted in the next PGA case.

464

465 1. **SBS entitlement**

466 **Q. What did CNE propose with regard to the SBS entitlement?**

467 A. CNE recommends that the SBS entitlement be extended to 31 days. (CNE Ex. 1.0,
468 p. 16)

469

470 **Q. What rationale did CNE use to justify this recommendation?**

471 A. CNE justified this proposal based on the fact that the allocation method approved
472 by the Commission in 04-0779 includes the peak day; and the peak day has fallen
473 from 5.3 Bcf to 4.9 Bcf. (Co. Response to DR DAS 6.10) Therefore, by holding the
474 fields' capacity constant, the would result in a higher allocation of peak days for all
475 customers, including transportation customers, resulting in an increased SBS
476 entitlement of 31 days.

477

478 **Q. What do you recommend with regard to SBS entitlement?**

479 A. I recommend that the SBS entitlement be updated from 04-0779 to reflect the new
480 peak design day of 4.9 Bcf the effect of which would be to allocate 31 peak days to
481 Transportation customers. However, as noted above, I have offered an alternative
482 for the Commission.

483

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

485 A. SBS entitlement is predicated on equal access to on-on-system storage assets.
486 The entitlement is determined by dividing the Working gas capacity by the peak
487 design day capacity to find the number of peak days that can be delivered from

488 storage. At the time of the last rate since the peak day for the system was 5.3 Bcf;
489 the Company could essentially meet 28 peak days from its non-coincident peak
490 working gas of 149.74 Bcf. Transportation customers were allowed to access an
491 equal number of days from the storage so 149.74 Bcf divided by 5.258 Bcf/ day
492 equals 28 days. This translates into 28 times Maximum Daily Contract Quantity
493 (“MDCQ”) of storage capacity per customer.

494

495 **Q. How does the decrease in the peak design day affect the entitlement here?**

496 A. With a peak design day of 4.9 Bcf number of peak days of capacity that can be
497 delivered is 149.74Bcf divided by 4.9 Bcf/Day or 31days

498

499 **Q. Does the Company agree with your recommendation?**

500 A. No. Mr. Mudra provides an example that he claims shows three more days of
501 capacity for transportation customers means three days less for sales customers.
502 However, he is able to achieve this result because he is not comparing the before
503 and after effects. Mr. Mudra is doing an *apples-to-oranges* comparison. Nicor Gas
504 is using the same methodology as all other parties, just a different capacity. Nicor
505 Gas attempts to shift the focus from the change in the size of the peak days to the
506 size of the Company’s non-coincident working gas in its storage fields that is
507 being divided by arguing that the outcome is unfair to sales customers. Mr. Mudra
508 objects to the *outcome* of the methodology. But he is proposing to use the same
509 established method of allocating the capacity.

510

511 **Q. How does his example depart from an apples-to-apples comparison?**

512 A. If he had used the “expected cycling” capacity definition, used by Mr. Mudra in his
513 example, then the allotment would have been 23 days, or five less than approved in
514 the last rate case.

515

516 **Q. Has the Company challenged using the peak day throughput to determine the**
517 **number of days of storage available?**

518 A. No. In fact, Nicor Gas supported the allocator in 04-0779 where Mr. Bartlett
519 testified that “Nicor Gas conducted an analysis of SBS capability and eligible SBS
520 customers’ demand using the same methodology as was used and approved in the
521 ‘95 Rate Case. *This remains an appropriate and reasonable method to allocate*
522 *available storage to SBS customers.*” (Docket No. 04-0779, Co. Ex. 8.0, p. 23,
523 emphasis added).

524

525 **2. Storage Banking Service (“SBS”) Charge**

526 **Q. What is the issue with regard to the SBS charge?**

527 A. The issue is once again the value to be used for capacity. This value is used to
528 divide the Storage costs less Nicor Gas’ working gas cost to obtain the SBS
529 charge. No party contests that once the capacity measure is chosen, then the
530 method for setting the charge is linked to that value. This is consistent with the
531 Commission’s decision in Docket No. 04-0779. Nicor Gas continues to use their
532 Operationally Available Capacity figure of 136.4, while others propose using peak
533 non-coincident working gas capacity of 149.7.as the divisor.

534

535 **Q. How is the cost-per unit determined?**

536 A. The SBS charge is calculated by dividing the Storage cost net of Nicor Top Gas
537 cost divided the capacity of working gas in the storage fields

538

539 **Q. What does Nicor Gas say about the differences in the existing and proposed**
540 **calculation methods of the SBS charge?**

541 A. Mr. Mudra says he is using the same “basic method” to calculate the SBS
542 charge. (Co. Ex. 29.0, p. 37). He quotes the Docket No. 04-0779 order and
543 concludes that since Nicor Gas is still linking the SBS charge to the calculation of
544 the Storage Capacity Allocation, there is no change. Mr. Mudra has misstated
545 Nicor Gas’ proposal as no change from the methods the Commission mandated
546 in the last rate case.

547

548 **Q. What is the purpose of the SBS charge?**

549 A. The SBS charge is a method of *allocating* the storage revenue requirement for
550 underground storage costs between the sales and transportation customers. It
551 has nothing to do with how much the utility should recover for its gas storage
552 costs excluding top gas. These costs are recovered from sales customers
553 through their base rates. They are not recovered through the base rates of
554 transportation customers.

555

556 **Q. What did Staff and Intervenors propose with regard to the SBS charge?**

557 A. Both Staff and CNE point to Nicor Gas' lack of clarity with regard to the SBS
558 charge. There are actually many issues where Nicor Gas essentially changes the
559 methodology it uses by not updating the inputs in its formulas to reflect current data.

560

561 **Q. How did Nicor Gas present the SBS charge in its direct case?**

562 A. Mr. Mudra testified in his direct testimony that the Storage revenue requirement
563 excluded gas storage losses.

564 To determine the SBS charge, the ECOSS was consulted, which shows the
565 total storage revenue requirement of \$83,186,000, excluding the cycled "top"
566 storage inventory and the corresponding gas storage losses (or lost and
567 unaccounted for gas) within the storage field operations...Top storage
568 inventory and the associated gas storage losses should properly be
569 excluded from the cost calculation as transportation customers provide their
570 own top gas inventory.
571 (Co. Ex. 14.0, pp. 24-25)

572

573 **Q. What do you recommend with regard to the SBS charge?**

574 A. I recommend that the numerator should properly exclude the sales portion of the
575 2% Gas losses that the Commission ordered in Docket No. 04-0779 be removed
576 from the PGA and recovered exclusively from Sales customers through their base
577 rates. After adjusting for this reduced storage costs, the new charge would be
578 \$0.0038 per therm.

579

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

581 A. After receiving Nicor Gas' response to DRs ENG 1.26 and 1.28, it became evident
582 that the storage revenue requirement in this case includes the sales customers'

583 portion of the 2% storage gas losses. The SBS charge that corresponds to the
584 amount approved in 04-0779 would require that Nicor Gas remove \$15.23 million
585 so that the storage revenue requirement excluding top gas is \$67.9 million. It would
586 be inappropriate to recover any of the sales customers' portion from transportation
587 customers. Transportation customers are already paying the in-kind repayment of
588 their portion of those losses (to include the Hub) and they should not be forced to
589 pay for the sales customers' portion as well. Therefore, Staff revises its calculation
590 of the SBS charge to \$0.0038 per therm.

591

592 **Q. What was the treatment of gas storage losses in Docket No. 04-0779?**

593 A. The currently approved methodology does not include any consideration for those
594 losses.

595 Staff's proposal is to move to base rates the expenses associated with the
596 2% withdrawal factor as to Sales customers, while to continue to permit
597 Nicor Gas to recover the expenses associated with the 2% withdrawal factor
598 through the lost-and-unaccounted-for adjustment as to Transportation
599 customers...Staff's position is adopted *in toto*.
600 (Order, Docket No. 04-0779, pp. 38, 40)

601

602 **Q. Did Nicor Gas admit its proposed treatment of gas storage losses was**
603 **incorrect in this case?**

604 A. Yes. Nicor Gas admitted an inadvertent inclusion of those costs in the storage
605 revenue requirement. In rebuttal, those costs were removed from the SBS
606 calculation yielding an uncontested numerator of \$67.9 million. (Co. Ex. 29.0, p. 37)

607

608 **Q. Did Nicor Gas also remove these costs from the transportation customers’**
609 **base rates in the ECOSS?**

610 A. Not that I can tell. In rebuttal, those costs were removed from the SBS calculation
611 but remained allocated to transportation customers in their base rates in the Nicor
612 Gas response to IIEC 5.10, the revised ECOSS. These should be removed from
613 the base rates of the transportation customers.

614

615 **3. Storage Withdrawal Factor**

616 **Q. Do you have any recommendations to clarify the discussion surrounding the**
617 **Storage Withdrawal Factor (“SWF”)?**

618 A. Yes. The SWF is calculated by multiplying the 0.017 *constant*, the Storage
619 Withdrawal Constant (“SWC”), by the percentage of SBS capacity filled in each
620 individual transportation customer’s bank on November 1st, the Storage withdrawal
621 Multiplier (“SWM”). The current tariff reference to the SWF is to the combination of
622 both the SWC and SWM and, therefore, is a value unique to each transportation
623 customer. Some parties refer to the *constant* 0.017 as the Storage Withdrawal
624 Factor (“SWF”). This is technically incorrect. For the sake of clarity, I recommend
625 that Nicor Gas use the term Storage Withdrawal Constant (SWC) to refer to this
626 Commission determined value.

627

628 **Q. What did IIEC propose with regard to the calculation of the SWF?**

629 A. IIEC suggests that Nicor Gas calculate the SWF by using the maximum inventory
630 achieved during a 30-day window between October 15th and November 15th to

631 determine whether the customer has complied with the intent of the Commission's
632 Docket No. 04-0779 directive to fill up their storage Banks before the end of the
633 injection season.

634

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

636 A. Since the intent here is to have the inventory filled up heading into the withdrawal
637 season, IIEC reasons that this change will induce that result but will make the
638 deadline less rigid. Dr. Rosenberg notes that Nicor Gas does not fill its fields right
639 on November 1st. (IIEC Ex. 1.0, p. 22)

640

641 **Q. How did Nicor Gas respond to IIEC's recommendation?**

642 A. Nicor Gas objected to this recommendation stating that it cannot wait until the 15th
643 of November because it can call a Critical Day beginning on November 1st and thus
644 it must have a SWM to allow for calculation of the SWF for those 15 days of
645 November. (Co. Ex. 19.0, pp.46-47) However, a subsequent DR response showed
646 that Nicor Gas uses a SWF of one for the month of November until the true values
647 can be determined. (Co. Response to DR DAS 7.20)

648

649 **Q. What do you recommend with regard to the Storage Withdrawal Multiplier
650 calculation window?**

651 A. I believe that the Commission should reject the IIEC recommendation but have
652 Nicor Gas calculate a SWM on November 1st for the period October 15th to
653 November 1st that will be in effect during the month of November and then a

654 second on November 15th for the period November 1st November 15th that will be in
655 effect for the rest of the withdrawal season.

656

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

658 A. I agree with the Company that this is impractical given the metering and billing
659 constraints. It also conflicts with the proposed trading of stored gas which I support
660 and which would address IIEC's concerns as they could buy gas before from other
661 transportation customers to help them meet the target.

662

663 **C. Costs associated with storage and system losses**

664 **1. Storage Loss Adjustment ("SLA") Factor**

665 **Q. Did you request Nicor Gas to provide information with respect to the SLA
666 factor?**

667 A. Yes. I asked Nicor Gas to clarify the methodology that it used to calculate its gas
668 storage losses, to allocate those costs amongst the customer classes and to
669 recover those costs.

670

671 **Q. Did Nicor Gas' response to your request raise any concerns?**

672 A. Yes. It is clear from the additional information that has come forth from Nicor Gas
673 that its methodology does not properly charge the Hub customers for any storage
674 losses.

675

676 **Q. Has the 2% factor been sufficiently verified by Nicor Gas?**

677 A. No. See the testimony of Mr. Anderson (Staff Ex. 22.0, pp.10-16).

678

679 **Q. How does Nicor calculate its gas storage losses?**

680 A. Nicor Gas calculates its 2% storage loss adjustment (“SLA”) factor by multiplying
681 the SLA by the metered *gross* withdrawals from its storage fields. This yields a
682 volumetric measure of the gas lost in the storage fields (Co. Response to DS ENG
683 1.25).

684

685 **Q. Aside from the problems from using a constant 2% factor, are there any other**
686 **issues regarding the allocation of these costs?**

687 A. The manner that Nicor Gas *allocates* the recovery of its losses is that it calculates
688 the allocation based on *net* withdrawals. (Co. Response to DR ENG 1.26, provided
689 as Attachment H) Nicor Gas claims that it cannot measure the *gross* withdrawals of
690 its customer groups. Nicor Gas calculates the proportional net withdrawals of
691 transportation, Hub and sales customers for the test year. Once it has determined
692 what each of these three groups should be responsible for, it recovers the sales
693 customers’ portion through base rates through Account 823 Gas Losses as a test
694 year cost. However, Hub customers are not assessed any of these costs and the
695 remainder of costs are recovered from transportation customers through the
696 Unaccounted-For Gas Adjustment (“UFGA”).

697

698 **Q. What is your specific concern about the allocation method chosen by Nicor**
699 **Gas?**

700 A. Nicor Gas' methodology allocates losses associated with gross withdrawals during
701 months that have net *injections* to its storage fields (May through October)
702 completely to transportation customers, despite the fact that those customers have
703 net injections just as sales customers do. There is no basis for choosing net
704 withdrawals as opposed to net injections, or average or maximum balances as a
705 measure for fairly allocating the recovery of those losses.

706

707 **Q. What do you recommend with regard to the SLA?**

708 A. Nicor Gas should be ordered to develop and file with the Commission a new
709 methodology that recovers gas storage losses from Hub customers and reduces
710 the volume that is recovered from transportation customers through the UFGA.

711

712 **2. Unaccounted-For Gas Adjustment ("UFGA")**

713 **Q. Did you request Nicor provide information regard to the UFGA?**

714 A. Yes. I asked Nicor Gas to clarify the methodology that it used to calculate its
715 UFGA, to allocate those costs amongst the customer classes and to recover those
716 costs. In response to DR DAS 6.01 Nicor Gas provided an explanation as to the
717 how the UFGA is calculated. (See Attachment H) Attachment H also describes the
718 process for recovering the UFGA. Nicor Gas reasons the Hub is exempt because
719 "virtually all FERC interstate and Rate 21 Intrastate Hub storage volumes are
720 scheduled directly of through an interstate pipeline to on-system customers" (Co.
721 Response to DR DAS 6.06). Nicor Gas uses the UFGA to recover in-kind the

722 storage gas losses. The UFGA is applied to *deliveries* to the system.² (Attachment
723 H)

724

725 **Q. What do you recommend with regard to the UFGA?**

726 A. I recommend that Nicor Gas be ordered to recover the UFGA from Hub deliveries.

727 The UFGA should be recalculated to include estimated Hub deliveries in the

728 denominator. This would result in a lower UFGA that would recover storage and

729 system losses from more customers.

730

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

732 A. The UFGA appears to be a fair method of allocating the losses associated with

733 system and storage losses. However, it is not the most accurate reflection of the

734 actual usage of the system and storage fields. A better method would be to split

735 the loss calculations and to recover the storage losses based on bank activity and

736 the system losses from deliveries. Also, it is clear that Nicor Gas does not allocate

737 any of that *system* loss to the Hub (Attachment H).

738

739 **D. Other operational issues**

740 **1. Intra-day nominations**

741 **Q. What did CNE propose with regard to intra-day nominations?**

² Over time withdrawals equal injections and injections are defined as deliveries minus usage. Therefore, deliveries must be greater than net withdrawals.

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

745

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

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

752

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

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

757

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

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

764

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

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

770

771 **2. Trading of stored gas**

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

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

778

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

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

782

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

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

787

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

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

795

796 **3. Timing of MDCQ**

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

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

802

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

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

808

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

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

814

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

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

823

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

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

828

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

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

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

833

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

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

837

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

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

844

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

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

849

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

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

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

866

867 **5. Seasonal usage maximum**

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

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

871

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

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

877

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

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

882

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

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

887

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

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

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

896

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

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

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

900

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

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

904

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

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

910

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

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

916

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

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

924

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

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

933

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

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

942

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

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

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

949

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

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

957

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

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

968

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

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

973

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

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

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

980

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

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

984

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

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

988

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

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

993

994 **C. Customer Select Administrative fee**

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

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

998

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

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

1003

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

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

1006

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

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

1010

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

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

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

1015

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

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

1019

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

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

1023

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

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

1027

1028 **E. Affiliate Access Issues**

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

1031 A. Yes. The Coalition for Equal Access and Fair Utility Rates ("CEAFUR") objected to
1032 various components of Nicor Gas' administration of its Customer Select Program.

1033 In particular, I identified two affiliate issues that are important and should be

1034 addressed. These two issues involve the use of Nicor Gas' website which links to

1035 its affiliate website and the Nicor Gas call centers that sell affiliate products and

1036 services to utility customers that.

1037

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

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

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

1045 www.nicorgas.com

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

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

1053

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

³ Typing in “www.nicorgas.com” yields the following URL: http://www.nicor.com/en_us/residential/
Typing in “www.nicorgas.com/myaccount”, which is the web address that appears on each
customer’s bill, yields the following URL: <https://www3.nicor.com/MyAccount/loginmain.aspx>

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

1055 **suppliers?**

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

1063

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

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

1069

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

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

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

1082

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

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

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

1090

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

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

1093

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

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

1100

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

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

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

1107

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

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

1114

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

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

1120

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

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

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

1127

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

1129 A. Yes.

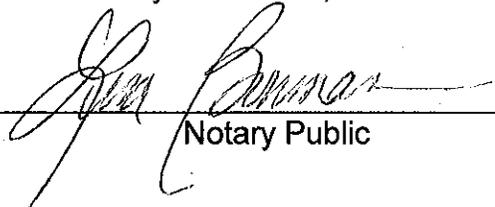
VERIFICATION

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



Illinois Commerce Commission

Subscribed and sworn to before me
this 24th day of October, 2008.



Notary Public



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

Ill.C.C. No. 16 - Gas
~~4th~~^{3rd} Revised Sheet No. 49
(Canceling ~~3rd~~^{2nd} Revised Sheet
No. 49, Effective October 3,
~~2001~~^{May 31,}
1997)

Terms and Conditions

(Continued from Sheet No. 48)

*** Transportation Limitations and Amounts.**

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

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

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

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

*** Order of Deliveries.**

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

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

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

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

(Continued On Sheet No. 50)

Filed with the Illinois Commerce Commission on November 4, 2004 ^{October 2, 2001}	Effective December 19, 2004 ^{October 3, 2001}
Issued pursuant to Order of the Illinois Commerce Commission	Issued by – Gerald P. O'Connor
Entered July 5, 2001 in Docket Nos. 95-0219-00-0620 and 00-0621-Consolidated	Vice President
Items in which there are changes are preceded by an asterisk (*)	Post Office Box 190 Aurora, Illinois- 60507

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

Ill.C.C. No. 16 - Gas
4th~~3rd~~ Revised Sheet No. 50
(Canceling ~~3rd~~^{2nd} Revised Sheet
No. 50, Effective October 3,
~~2001~~^{May 31,}
~~1997~~)

Terms and Conditions

(Continued From Sheet No. 49)

- * On November 1, Customer's that can annually subscribe to SBS shall have their elected SBS capacity filled to a minimum of 90 percent. A Storage Withdrawal Factor (SWF), expressed as a numerical value not to exceed 1.0, shall be determined by dividing the Customer's November 1 SBS inventory balance by their respective and then effective SBS capacity. Any SWF value greater than or equal to 0.90 shall be rounded 1.0. Any SWF less than 0.90 shall be rounded up to the next 0.01. A Customer's SWF shall be applied to their individual SBS withdrawals rights and serve to reduce their withdrawal rights on any Critical Day or OFO Shortage Day.
- * On April 1, Customer's that can annually subscribe to SBS shall have their SBS inventory balance reduced to a maximum of 10 percent. A Storage Injection Factor (SIF), expressed as a numerical value, shall be determined by subtracting from one (1), the result obtained from dividing the Customer's April 1 SBS balance by their respective elected SBS capacity. Any SIF value greater than or equal to 0.90 shall be rounded to 1.0. Any SIF less than 0.90 shall be rounded up to the next 0.01. A SIF shall be applicable to the 25 percent monthly storage injection component of each Customer's respective MDN quantities in effect beginning May 1 through October 31 of each year.
- * Terms available for withdrawal from storage on a Critical Day or OFO Shortage Day shall be limited to a Customer's SWF times 0.0210-0.023 times the Customer's Storage Banking Service capacity. Storage withdrawals are deemed to occur when Customer usage exceeds Requested Authorized Use and Customer-owned gas delivered.

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

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

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

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

_(Continued On Sheet No. ~~51~~^{50.1})

Filed with the Illinois Commerce Commission on <u>November 4, 2004</u> October 2, 2001	<u>Effective December 19,</u> 2004 ^{October 3, 2001}
Issued pursuant to Order of the Illinois Commerce Commission	Issued by – <u>Gerald P.</u> <u>O'Connor</u> George M. Behrens
Entered July 5, 2001 in Docket Nos. 00-0620 and 00-0621 Consolidated	Vice President
Items in which there are changes are preceded	Post Office Box 190
by an asterisk (*)	Aurora, Illinois 60507

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

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

DAS 7.22
Page 2 of 2

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

- e. Yes.

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

Witness: Robert R. Mudra

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

CNE 2.01 Q. On page 29 of the direct testimony of Robert R. Mudra, Mr. Mudra identifies the .017 factor representing the daily proportion of peak day deliverability to cycled storage capacity from the 2004 rate case and states, based upon 2009 test year data, the factor should be updated to .018.

- a. Please provide a description of the formula that is used to determine this factor.
- b. Please identify and describe any differences between the formula as it is used in the instant proceeding compared to how it was used per the Commission's order in Docket No. 04-0779.
- c. Please provide the 2009 test year data and calculations that were used to derive the .018 factor.
- d. Please provide any workpapers supporting the calculations used to derive the .018 factor.

CNE 2.01 A. a. The critical day storage withdrawal limitation factor is equal to the amount of gas available from Company storage facilities on a peak day divided by the Storage Banking Service capacity allocation.

- b. The formula is the same as used in Docket No. 04-0779.
- c. Storage deliverability on a peak-day is 25,000,000 therms, divided by storage banking service allocation of (28 MDCQ days X 49,000,000 therms) = 1,372,000,000 therms is 0.0182 or rounded to 0.018.
- d. No workpapers were developed or relied on for this calculation.

Witness: Robert R. Mudra

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

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

Corrected Response

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

Witness: Robert R. Mudra

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

Prepared for

Nicor Gas, Inc.

October 25, 2004

Prepared by



Fairchild and Wells, Inc.
PETROLEUM AND ENVIRONMENTAL CONSULTANTS



October 25, 2004

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

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

Dear Mr. McCaffrey:

SUMMARY

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

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

Table 1

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

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

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

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

ENGINEERING ANALYSIS

Top Gas/ Base Gas

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

Rate vs. Gp (Storage Gas Withdrawn)

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

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

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

Mr. John W. McCaffrey
October 25, 2004

Page 3

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

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

Performance Coefficients vs. Percent of Inventory Out

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

Water Production vs. Cumulative ~~Gas~~ Produced

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

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

Non-Recoverable Base Gas

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

P/z versus Gp

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

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

Material Balance and Water Influx

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

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

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

To calculate water influx, W_e, we have used the method of Carter-Tracy³. This technique is an accepted method and is used in most reservoir simulators.

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

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

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

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

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

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

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

Recoverable Base Gas

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

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

Mr. John W. McCaffrey
October 25, 2004

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

Sincerely,

James W. Fairchild

James W. Fairchild
President

cc: Neil Maloney w/attachment ✓

JWF:jrb
Attachments (Figures 1-24)

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

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

Witness: Robert R. Mudra

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

Volumes in MMBtu

1998		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/30/1998	58,856,151
Hudson	11/16/1998	11,227,110
Lake Bloomington	11/9/1998	8,397,419
Lexington	12/5/1998	7,252,911
Pecatonica	12/5/1998	1,375,819
Pontiac Mt Simon	12/6/1998	5,501,002
Pontiac Galesville	12/6/1998	8,197,963
Troy Grove	10/27/1998	42,946,087
		143,754,462

1999 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/13/1999	58,349,798
Hudson	11/16/1999	11,612,863
Lake Bloomington	11/9/1999	8,350,225
Lexington	11/22/1999	7,848,057
Pecatonica	2/15/1999	1,205,274
Pontiac Mt Simon	11/22/1999	5,264,104
Pontiac Galesville	7/31/1999	28,940,037
Troy Grove	11/12/1999	43,088,359
		164,658,717

2000 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/6/2000	60,437,407
Hudson	11/15/2000	10,695,423
Lake Bloomington	11/14/2000	8,067,518
Lexington	11/13/2000	7,886,006
Pecatonica	1/1/2000	979,459
Pontiac Mt Simon	11/7/2000	4,893,455
Pontiac Galesville	11/6/2000	8,367,686
Troy Grove	11/2/2000	45,644,469
		146,971,423

2001 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/5/2001	63,056,085
Hudson	11/29/2001	12,187,316
Lake Bloomington	11/19/2001	9,007,751
Lexington	11/12/2001	9,012,081
Pecatonica	9/1/2001	1,113,521
Pontiac Mt Simon	12/16/2001	5,722,193
Pontiac Galesville	12/13/2001	8,608,047
Troy Grove	11/26/2001	47,560,488
		156,267,482

2002 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/30/2002	62,653,023
Hudson	11/14/2002	11,112,345
Lake Bloomington	11/14/2002	8,731,570
Lexington	11/18/2002	8,152,810
Pecatonica	11/22/2002	1,173,306
Pontiac Mt Simon	11/21/2002	5,288,041
Pontiac Galesville	11/24/2002	8,238,441
Troy Grove	10/22/2002	47,159,026
		152,508,562

2003 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/26/2003	62,945,125
Hudson	11/30/2003	11,200,057
Lake Bloomington	11/30/2003	8,534,352
Lexington	11/22/2003	7,847,578
Pecatonica	1/1/2003	1,173,307
Pontiac Mt Simon	11/23/2003	5,113,335
Pontiac Galesville	11/5/2003	8,044,677
Troy Grove	10/31/2003	47,549,776
		152,408,207

2004 - On-System by Field (1)		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/25/2004	58,403,490
Hudson	1/1/2004	8,979,269
Lake Bloomington	11/29/2004	7,604,067
Lexington	11/22/2004	7,274,479
Pecatonica	12/18/2004	1,482,923
Pontiac Mt Simon	1/1/2004	3,589,186
Pontiac Galesville	11/10/2004	7,812,625
Troy Grove	10/30/2004	45,684,743
		140,830,782

2005 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/31/2005	59,085,060
Hudson	11/29/2005	9,136,017
Lake Bloomington	11/18/2005	7,617,144
Lexington	11/28/2005	6,850,810
Pecatonica	1/12/2005	1,521,079
Pontiac Mt Simon	11/30/2005	3,781,319
Pontiac Galesville	11/23/2005	7,454,518
Troy Grove	11/8/2005	43,515,526
		138,961,473

2006 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	10/31/2006	56,819,628
Hudson	11/12/2006	8,393,645
Lake Bloomington	11/14/2006	7,663,892
Lexington	11/12/2006	7,079,473
Pecatonica	1/1/2006	1,341,333
Pontiac Mt Simon	11/13/2006	3,533,336
Pontiac Galesville	10/31/2006	7,970,447
Troy Grove	10/31/2006	42,200,658
		135,002,412

2007 - On-System by Field		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	11/1/2007	57,049,377
Hudson	11/12/2007	8,568,834
Lake Bloomington	11/12/2007	7,730,614
Lexington	11/12/2007	6,985,443
Pecatonica	11/13/2007	1,372,140
Pontiac Mt Simon	12/10/2007	2,776,801
Pontiac Galesville	10/19/2007	8,159,694
Troy Grove	10/31/2007	41,533,335
		134,176,238

2008 - On-System by Field (2)		
Storage Field	Date	Volume (MMBtu)
Ancona/Garfield	1/1/2008	38,325,132
Hudson	1/1/2008	5,181,542
Lake Bloomington	1/1/2008	4,544,654
Lexington	1/1/2008	4,577,009
Pecatonica	1/7/2008	1,368,936
Pontiac Mt Simon	1/1/2008	1,972,087
Pontiac Galesville	1/1/2008	6,662,916
Troy Grove	8/31/2008	27,495,961
		90,128,237

Leased Storage		
Year	Date	Volume (MMBtu)
2001	9/20/2001	8,037,538
2002	10/21/2002	7,944,613
2003	10/31/2003	38,817,504
2004	10/31/2004	39,307,054
2005	11/5/2005	38,518,514
2006	10/31/2006	35,525,772
2007	10/30/2007	33,748,027
2008 (2)	8/31/2008	25,684,603

Total - On-System Storage		
Year	Date	Volume (MMBtu)
1998	12/6/1998	139,214,187
1999	11/13/1999	142,046,331
2000	11/7/2000	143,753,201
2001	11/24/2001	150,891,639
2002	10/30/2002	145,774,482
2003	11/4/2003	144,050,156
2004	10/31/2004	131,958,416
2005	11/8/2005	132,469,032
2006	11/9/2006	131,851,462
2007	11/4/2007	130,392,564
2008 (2)	1/1/2008	90,126,891

Total - On-System and Leased Storage		
Year	Date	Volume (MMBtu)
2001	11/24/2001	152,250,715
2002	10/30/2002	152,970,202
2003	11/2/2003	182,269,140
2004	10/31/2004	171,265,470
2005	11/8/2005	170,931,775
2006	10/31/2006	166,708,738
2007	11/4/2007	163,587,610
2008 (2)	1/1/2008	115,315,483

Total - Non Coincident On-System Storage	
Year	Volume (MMBtu)
1998	143,754,462
1999	164,658,717
2000	146,971,423
2001	156,267,482
2002	152,508,562
2003	152,408,207
2004	140,830,782
2005	138,961,473
2006	135,002,412
2007	134,176,238
2008 (2)	90,128,237

On-system %		
164,305,020		95%
160,453,175		95%
191,225,711		80%
180,137,836		78%
177,479,987		78%
170,528,184		79%
167,924,265		80%
115,812,840		78%

2004-2007	Average	137,242,726
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(1) - Balances reflect a top to base reclassification that was made in September 2004.
(2) - Representative of maximum balance for January through August 2008.

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

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

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

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

Witness: James M. Gorenz

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

Example - Storage Gas Losses
December 2007

Volumes in MMBtu

<u>Storage Field</u>	(a)		(b)	(a) + (b) = (c)	(d)	(c) - (d) = (e)	(f)	(g)	(e)-(f)-(g) = (h)	(h) / (e) = (i)	(i) * (b) = (j)	(b)-(j) = (k)
	Gross Withdrawals	X 2%	Storage Gas Loss	Aquifer Withdrawal	Aquifer Injection	Net Aquifer Withdrawal	Transportation Net Withdrawal	Hub Net Withdrawal	Sales Net Withdrawal	Sales Allocation	Sales Portion of Storage Loss	Transportation Portion of Storage Loss
Ancona	10,560,312	2%	211,206									
Hudson	2,192,970	2%	43,860									
Lake Bloomington	2,065,359	2%	41,304									
Lexington	1,707,324	2%	34,143									
Pecatonica	-	2%	-									
Pontiac Mt. Simon	747,300	2%	14,946									
Pontiac Galesville	1,023,571	2%	20,471									
Troy Grove	7,665,480	2%	153,310									
	<u>25,962,316</u>		<u>519,241</u>	26,481,557	464,610	26,016,947	6,345,204	1,839,521	17,832,222	68.54%	355,892	163,349

Notes:

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