

ILLINOIS COMMERCE COMMISSION

ICC DOCKET NO. 07-0539

REBUTTAL TESTIMONY

OF

RICHARD A. VOYTAS

Submitted On Behalf

Of

**CENTRAL ILLINOIS LIGHT COMPANY d/b/a AmerenCILCO,
CENTRAL ILLINOIS PUBLIC SERVICE COMPANY d/b/a AmerenCIPS, and
ILLINOIS POWER COMPANY d/b/a AmerenIP
(The Ameren Illinois Utilities)**

December 21, 2007

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1 **I. INTRODUCTION**

2 **A. Witness Identification**

3 **Q. Please state your name.**

4 A. My name is Richard A. Voytas.

5 **Q. Are you the same Richard A. Voytas who submitted prefiled direct testimony**
6 **on behalf of the Ameren Illinois Utilities?**

7 A. Yes.

8 **B. Purpose and Scope**

9 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

10 A. The purpose of my testimony is to respond to and discuss proposals submitted in
11 the direct testimony of other parties, regarding the Ameren Illinois Utilities'
12 Energy Efficiency and Demand Response Plan. Specifically, I respond to the

13 direct testimony of the Attorney General of Illinois (“AG”), the Environmental
14 Law and Policy Center (“ELPC”), and the Natural Resources Defense Council
15 (“NRDC”). Ameren Illinois Utilities’ witnesses Stan E. Ogden, Val R. Jensen
16 and Leonard M. Jones are concurrently submitting rebuttal testimony as well.

17 **Q. Please summarize the conclusions of your rebuttal testimony.**

18 A. The Ameren Illinois Utilities agree that stakeholder participative processes will
19 enhance the quality of energy efficiency and demand response program planning,
20 implementation and evaluation. We are confident that going forward we can
21 work through issues in an open, transparent manner with stakeholders.

22 Regarding statewide consistency in energy efficiency and demand response
23 programs, we agree that there is potential relative to customer information and
24 education. However, we think the Ameren Illinois Utilities service territories are
25 unique and require utility-specific programs.

26 Finally, relative to where other states were at the beginning of their energy
27 efficiency program implementation plans, the 2008-2010 Ameren Illinois
28 Utilities implementation plan is aggressive. This is simply a recognition of the
29 challenge the Ameren Illinois Utilities embrace in bringing meaningful, cost-
30 effective energy efficiency solutions to our customers.

31 **C. Identification of Exhibits**

32 **Q. Will you be sponsoring any exhibits with your rebuttal testimony?**

33 A. Yes, I am attaching and sponsoring the following exhibits:

- 34 • Ameren Ex. 7.1 – The State Energy Efficiency Scorecard For
35 2006, June 2007, American Council For An Energy Efficient Economy
36 (“ACEEE”) Report Number E075
- 37 • Ameren Ex. 7.2 - The National Action Plan For Energy Efficiency
38 Model Energy Efficiency Program Impact Evaluation Guide
- 39 • Ameren Ex. 7.3 - “Compact Fluorescent Lighting in America:
40 Lessons Learned on the Way to Market,” study by the Pacific Northwest
41 National Laboratory for the U.S. Department of Energy Efficiency and
42 Renewable Energy Building Technologies Program, June 2006

43 **II. DISCUSSION OF STAFF AND INTERVENOR DIRECT TESTIMONY**

44 **A. Introduction**

45 **Q. What are your overall conclusions regarding the intervenors’ direct**
46 **testimony in this case?**

47 A. As a summary and introductory comment on AG’s, ELPC’s, and NRDC’s
48 testimony, it appears that all of their testifying experts have positive and
49 thoughtful suggestions as to how the Ameren Illinois Utilities should implement
50 the specific details of our Plan. The experience and guidance of these and other
51 individuals will be quite useful in putting the Ameren Illinois Utilities’ Plan into
52 successful practice. We look forward to their input throughout the collaborative
53 process. However, after review of their testimony, I believe it is necessary to
54 reiterate that the Ameren Illinois Utilities’ responsibility of meeting statutory
55 requirements and goals is ours and ours alone, as discussed further in Mr.
56 Ogden’s testimony. Accordingly, the Ameren Illinois Utilities must and will view
57 the helpful input of all stakeholders through the lens of the Act’s requirements.

58 **Q. Do other parties offer recommendations in accordance with the Act?**

59 A. Yes and no. I have two general impressions: First, all parties appear to recognize
60 the Ameren Illinois Utilities' stated responsibilities under the Act. Much of the
61 testimony, however, does not generally appear to fully take these responsibilities
62 into account when offering practical recommendations. These experts necessarily
63 have cut their teeth in other states, following other applicable laws and regulatory
64 structures. It certainly makes sense to apply the knowledge gained in other
65 jurisdictions to the Illinois context. But again, such application must fall in line
66 with statutory constraints, and the Ameren Illinois Utilities alone have the
67 responsibility to gauge and evaluate the merits of any given proposal in the
68 context of those constraints in order to meet their goals. *Second*, while AG,
69 ELPC, and NRDC offer cursory praise for the Ameren Illinois Utilities' ability to
70 formulate and propose a Plan under tight deadlines, much of their criticism of the
71 Plan focuses on proposals that would necessarily have taken a great deal more
72 time and resources to implement – for example, an energy efficiency measure
73 technical potential study, creation of an Illinois equivalent DEER database,
74 examining variations in plans, portfolios, and collaborative processes, as well as
75 an extensive pre-filing collaborative process and exhaustive independent analysis.
76 We simply did not have the time to undertake these types of preparations. This
77 practical reality is not recognized in much of the intervenors' testimony.

78 Regardless, the Ameren Illinois Utilities appreciate helpful stakeholder input in
79 any form. We will give all of these suggestions appropriate consideration going
80 forward.

81 **B. Discussion of Testimony by AG Witness Mosenthal**

82 **Q. Did you review the direct testimony of AG Witness Philip H. Mosenthal, AG**
 83 **Exhibit 1.0?**

84 A. Yes I did.

85 **Q. What specific comments do you have on Mr. Mosenthal’s recommendations?**

86 A. Specifically, I will comment on Mr. Mosenthal’s recommendations: (1) on the
 87 functions and structure of the stakeholder collaborative; (2) on the EE/DR
 88 program portfolio; (3) on statewide consistency; and (4) on certain program
 89 design issues. Ameren Illinois Utilities witness Val Jensen addresses the
 90 remaining program design issues raised in Mr. Mosenthal’s testimony.

91 **Q. Do you agree with Mr. Mosenthal’s recommendations?**

92 A. The following matrix lists summarizes Mr. Mosenthal’s recommendations and
 93 either my agreement, disagreement or modified agreement with each
 94 recommendation.

95

Recommendation	Agree	Disagree	Modified Agree
Stakeholder collaborative structure			X
Aggressiveness of Illinois savings goals		X	
Statewide consistency in programs		X	

96 **1. Stakeholder Collaborative**

97 **Q. Please explain Mr. Mosenthal’s recommendations on the key functions and**
98 **structure of a stakeholder collaborative.**

99 A. I appreciate Mr. Mosenthal’s recognition that implementation methods must
100 remain flexible, and that the Ameren Illinois Utilities are ultimately responsible
101 for “the many decisions that will need to be made after the close of this
102 proceeding to implement the programs needed to comply with the statutory
103 standards.” (AG Ex. 1.0, p. 8.) His specific recommendations, however, seem
104 inconsistent with this fact.

105 **Q. Please explain.**

106 A. Mr. Mosenthal points to collaborative approaches in the Northeast as examples of
107 how stakeholders can work together on demand-side management (“DSM”)
108 implementation and evaluation as well as what the key functions and structures
109 should be. His testimony suggests an independent, consensus-based,
110 collaborative approach that would not entirely relieve a utility from decision-
111 making responsibility. However, if consensus is not reached, Mr. Mosenthal
112 states that stakeholders should still be free to seek resolution of the disagreement
113 at the ICC or in another forum.

114 **Q. Do you agree with this recommendation?**

115 A. The Ameren Illinois Utilities agree with the need for an effective stakeholder
116 participative process to address program design, implementation and evaluation
117 issues and monitor and verify performance. However, the devil is in the details.

118 Mr. Mosenthal offers no detail with respect to any particular Northeastern
119 regulatory structure. It is entirely unclear from his testimony whether the utilities
120 using such programs face the same type of statutory requirements set forth in the
121 Act. For example, the Act requires the Ameren Illinois Utilities to meet annual
122 energy savings goals and budget caps, and face financial and potential governance
123 penalties for failure to meet the requirements of the law. Further, the Ameren
124 Illinois Utilities must begin to meet annual energy savings goals within a very
125 short period of time – starting in 2008. It would be necessary to examine similar
126 aspects of a state’s regulatory structure in order to determine whether a given
127 collaborative process would be appropriate for Illinois.

128 **Q. Please explain what potential differences may exist in the regulatory**
129 **frameworks for Connecticut, Maryland, Massachusetts and Vermont – the**
130 **states which Mr. Mosenthal has identified as having exemplary stakeholder**
131 **processes.**

132 A. To examine whether relevant differences exist, I would ask the following
133 questions:

- 134 1. Are load reduction goals set by law or via another process, perhaps self-
135 established via a stakeholder collaborative process?
- 136 2. What are the specific requirements in the law or state regulations that
137 establish the framework for implementing energy efficiency?
- 138 3. Are there annual budget caps set by law that limit spending on energy
139 efficiency
- 140 4. Are there load reduction goals with financial penalties associated with not
141 meeting the goals as well as potential governance penalties?

- 142 5. Are there performance incentives associated with meeting or exceeding
143 goals?
- 144 6. When did each state begin offering energy efficiency products and
145 services?
- 146 7. When did each state begin using a stakeholder collaborative process to
147 address energy efficiency issues?
- 148 8. How are stakeholder collaborative processes funded?

149 In my opinion, careful consideration of any collaborative process for potential
150 implementation in Illinois must begin with answers to these threshold questions.

151 **2. EE/DR Program Portfolios**

152 **Q. Please summarize Mr. Mosenthal’s disagreement “with the PAs**
153 **characterization that the savings goals for 2008-2010 are aggressive.” (AG**
154 **Ex. 1.0, p. 9.)**

155 A. Mr. Mosenthal bases this assertion on the fact that many states in the Northeast
156 and West Coast are at or above the 1% incremental savings level, and points to
157 the fact the Ameren Illinois Utilities, ComEd and DCEO have 8 years in Illinois
158 to get to the 2% load reduction level.

159 **Q. Do you agree with this assertion?**

160 A. No. This is an “apples-to-oranges” comparison. Mr. Mosenthal’s compares the
161 Act’s energy savings goals for Illinois with states that have had energy efficiency
162 programs in place for decades. For example, Vermont has been implementing
163 energy efficiency programs for 17 years (since 1990), and California (a “West
164 Coast” state) for 29 years (since 1978). Comparatively, Illinois is just beginning
165 wide scale energy efficiency program implementation. A more helpful

166 comparison would be to compare load reduction goals in states that are in the first
167 three years of their energy efficiency implementation plans. This comparison
168 would take into account time to build the appropriate infrastructure to deliver
169 programs as well as the time to educate and inform customers about the
170 importance of energy efficiency – which even Mr. Mosenthal acknowledges is
171 lacking.

172 **Q. What are other factors that influence the aggressiveness of energy savings**
173 **goals?**

174 A. There are several factors to consider. One is whether energy savings goals are
175 expressed in terms of overall load reductions or as a percentage of load growth.
176 Another factor may be whether the annual energy savings goals are incremental or
177 additive (as in Illinois). Yet another factor is the per capita budget spent to
178 achieve the energy efficiency goals. This type of information is necessary in
179 order to make a meaningful comparison.

180 **Q. Please explain why additive annual energy savings goals are more aggressive**
181 **than incremental.**

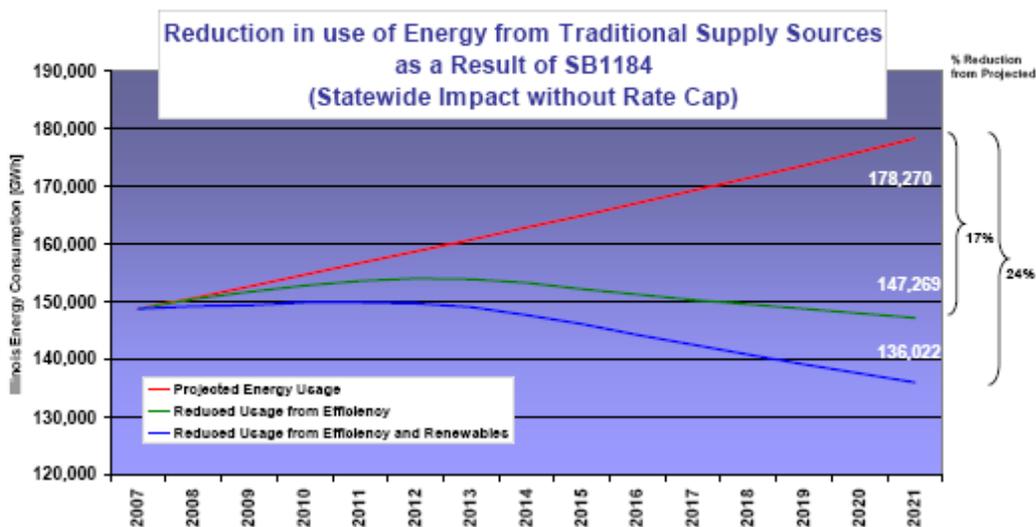
182 A. I will use a simple example to explain the difference: Assume a two-year energy
183 savings goal, with a 1% energy savings goal in year 1 and a 2% energy savings
184 goal in year 2. From an incremental perspective, the first year energy savings
185 would be 1%, and the second year savings would also be 1% ($2\% - 1\% = 1\%$).
186 From an additive perspective, the base year's load growth would be reduced by
187 1% in year 1. The load at the end of year 1 would then be the basis for reducing

188 load by an additional 2% in year 2, such that overall load would be reduced by
 189 approximately 3% (assuming no load growth), relative to the base year.

190 **Q. Why is this relevant to the consideration of how aggressive annual energy**
 191 **savings goals may or may not be?**

192 A. A Midwest Energy Efficiency Alliance (“MEEA”) analysis from May 2007
 193 illustrates the impact of the additive annual energy savings goals in Illinois. The
 194 following graph from the MEEA report illustrates on an Illinois statewide basis
 195 the annual energy savings that are projected to result of implementing the Law:

Figure 1



196

197 The graph illustrates the additive nature of the Act, such that by 2016, the electric
 198 energy consumption in Illinois is forecast to be less than what it is today, as a
 199 direct result of reduced usage from energy efficiency. If the term “aggressive” in
 200 the context of energy savings goals means not only eliminating load growth but
 201 eliminating both load growth and some portion of existing load, the Illinois

202 energy savings goals should be considered aggressive. Comparing similar data
203 from states that Mr. Mosenthal references (e.g., Vermont, New York,
204 Massachusetts) would be the only way to analyze the aggressiveness of Illinois
205 energy savings goals relative to the other referenced states.

206 **Q. Please explain the per capita spending on energy efficiency metric.**

207 A. Per capita spending on energy efficiency is one of the metrics that the American
208 Council For An Energy Efficient Economy (“ACEEE”) uses to rank state energy
209 efficiency policies and to identify exemplary programs and policies within each
210 policy category.

211 **Q. Where do the Ameren Illinois Utilities rank in terms of this metric?**

212 A. The Ameren Illinois Utilities per capita spending is projected to be \$11 in 2008,
213 \$23 in 2009 and \$36 in 2010. Based on the ACEEE State Energy Efficiency
214 Scorecard For 2006 (Ameren Ex. 7.1), these per capita spending levels would put
215 the Ameren Illinois Utilities among the top 10 states beginning in 2008 (in
216 comparison, the ACEEE scorecard ranked Vermont 1st in per capita spending at
217 \$22.54, based on 2004 spending). By 2010, the Ameren Illinois Utilities may be
218 ranked at a level equivalent to being among the top five states in per capita
219 spending. In a word, the Ameren Illinois Utilities energy savings annual budgets
220 are aggressive – especially for a utility in the early stages of ramping up its energy
221 efficiency programs.

222 **3. Statewide Consistency**

223 **Q. Please explain Mr. Mosenthal's recommendation on statewide consistency in**
224 **programs.**

225 A. Mr. Mosenthal states that the Ameren Illinois Utilities, ComEd, and DCEO
226 should work to resolve any program differences and offer consistent statewide
227 programs. He further states that markets do not neatly separate by service
228 territory, and that offering different incentive levels for the same products, having
229 different rules about minimum qualifying efficiency or installation practices, etc.
230 will create confusion in the market for trade allies, vendors, design professionals
231 and customers with facilities in more than one utility area.

232 **Q. Do you agree with Mr. Mosenthal's assumptions and recommendation?**

233 A. No. As Mr. Ogden also testifies, pursuing statewide consistency should be a goal,
234 but in the proper context. The Ameren Illinois Utilities service territory is unique
235 from the ComEd service territory. There are valid reasons to have utility-specific
236 rather than state-specific programs in Illinois.

237 **Q. Discuss some of the distinguishing features of the Ameren Illinois Utilities'**
238 **service territory.**

239 A. The Ameren Illinois Utilities Service territory covers 44,000 square miles. The
240 ComEd service territory covers 11,300 square miles. Population densities are 27
241 customers per square mile for the Ameren Illinois Utilities and 327 customers per
242 square mile for ComEd. ComEd and the Ameren Illinois Utilities are at different
243 stages in developing customer demand response capabilities. The Ameren Illinois
244 Utilities' customer base has different appliance saturations and appliance vintages
245 than ComEd. The housing stock in terms of age, square footage and type (single

246 family detached vs. attached or apartment) are also different. These are just some,
247 but not all, of the distinguishing features that may likely shape differences
248 between the utilities' plans.

249 **Q. Please discuss Mr. Mosenthal's statement that markets do not neatly**
250 **separate by service territory.**

251 A. Mr. Mosenthal's statement may be based on his vast experience with the state of
252 Vermont, which has significantly different characteristics than Illinois. For
253 example, the state of Vermont has 22 electric distribution utilities, one of the
254 highest ratios of utilities to customers in the nation. The complexity of such a
255 large number of utilities providing energy services in their separate service
256 territories often led to confusing, costly, and sometimes conflicting DSM program
257 design and delivery. There are exceptions to rules. Even in Vermont, there is at
258 least one utility, the Burlington Electric Department, who conducts its own energy
259 efficiency program. Another distinguishing feature of Vermont that is
260 significantly different than Illinois is size. Vermont has approximately 9,620
261 square miles relative to the Ameren Illinois Utilities service territory of 44,000
262 square miles. Last, but not least, the population of Vermont is approximately
263 600,000, as compared to Illinois's population of approximately 12.5 million.

264 **4. Program Design Issues**

265 **Q. What are the program design issues that you will address?**

266 A. I will address Mr. Mosenthal's testimony regarding the LEED new commercial
267 construction program. Also, I will address Mr. Mosenthal's testimony on page

268 18, stating that the Ameren Illinois Utilities should focus on more durable or long-
269 lasting energy efficiency measures.

270 **Q. Please summarize Mr. Mosenthal’s testimony on the LEED program?**

271 A. Mr. Mosenthal disagrees with the Ameren Illinois Utilities’ plan to target LEED
272 new construction projects, stating that “customers that commit to the LEED
273 program will need energy-efficiency design to attain the rating, and a focus on
274 LEED projects will result in a very high level of free-ridership.” (AG Ex. 1.0, p.
275 18.)

276 **Q. Do you agree with Mr. Mosenthal?**

277 A. No. LEED is a market transformation program, which is designed to educate and
278 inform building owners, design professionals, building contractors and other trade
279 allies to support and utilize the LEED rating system. Mr. Mosenthal appears to
280 misunderstand the program – especially if he believes that this program is an
281 after-the-fact approach to offer incentives to customers who have already made
282 the decision to both seek LEED certification and to install the most energy
283 efficient equipment possible.

284 **Q. Discuss Mr. Mosenthal’s testimony that the Ameren Illinois Utilities should**
285 **focus on more durable or long lasting energy efficiency measures. (AG Ex.**
286 **1.0, p. 18.)**

287 A. Mr. Mosenthal broadly states that “the longer savings last the greater the
288 economic and environmental benefits to ratepayers and Illinois as a whole.” At
289 the risk of being too blunt, this statement is unsupportable. The simple math is

290 that programs with large savings for a few years may reduce more energy
291 consumption than programs with small savings for longer years.

292 The following example illustrates the fallacy in Mr. Mosenthal’s contention: The
293 Ameren Illinois Utilities use 1993 as the manufacturing date for refrigerators to be
294 eligible for the refrigerator recycling program. The assumption on the average
295 energy usage for this vintage of refrigerator is 1900 KWH per year. The
296 Department of Energy assumes a 19-year life on refrigerators. Consequently, if a
297 1993 refrigerator was collected and recycled in 2008, theoretically it would have
298 only been operational through 2012 (or a period of four additional years). Total
299 energy saved could be calculated as 1900 KWH times 4 years (2012-2008) which
300 equals 7600 KWH.

301 A refrigerator is the most energy-intensive appliance in the typical household. A
302 standard refrigerator today consumes approximately 500 KWH per year. An
303 ENERGY STAR refrigerator uses approximately 15% less energy or 425 KWH
304 per year – a savings of 75 KWH per year. If, as a result of an Ameren Illinois
305 Utilities energy efficiency appliance incentive program, a customer chooses an
306 ENERGY STAR refrigerator, and if the new refrigerator lasts for 19 years, the
307 total lifetime energy consumption savings are 75 KWH per year times 19 years or
308 1,425 KWH.

309 Consequently, the per unit savings on the shorter life refrigerator recycling
310 program far exceed those of the longer life new energy efficiency refrigerator
311 incentive program.

312

313 C. Discussion of Testimony by ELPC Witness Crandall

314 Q. Did you review the direct testimony of ELPC Witness Geoffrey C. Crandall,
 315 Exhibit 1.0?

316 A. Yes I did.

317 Q. Do you agree with his recommendations?

318 A. The following matrix lists Mr. Crandall’s recommendations and either my
 319 agreement, disagreement or modified agreement with each recommendation that
 320 pertains to program planning and analysis.

Recommendation	Agree	Disagree	Modified Agree
Stakeholder input/collaborative process			X
EM&V Contractor Dismissal		X	
Reallocation of funds			X
Statewide branding of programs		X	
Customer education and awareness	X		
Implementation schedule		X	
Need for a technical potential study			X
Development of Illinois equivalent of DEER			X

321

322

323 **1. Stakeholder Collaborative**

324 **Q. Please explain Mr. Crandall’s proposal for stakeholder input and a**
325 **collaborative process.**

326 A. Mr. Crandall proposes a process similar to the one described by NRDC in their
327 testimony with several modifications, including a facilitator that provides
328 technical expertise to the working group and an additional technical working
329 group/advisory board consisting of energy efficiency and program
330 implementation experts. Mr. Crandall states that recommendations from the
331 technical advisory board or evaluation, measurement and verification (EM&V)
332 group would be non-binding on the utility.

333 **Q. Do you agree with this recommendation?**

334 A. I do not think the recommendation is based on an accurate understanding of the
335 Ameren Illinois Utilities’ proposed stakeholder participative process. Mr.
336 Crandall apparently assumes that the stakeholder meetings that the Ameren
337 Illinois Utilities, ComEd and DCEO conducted with stakeholders between August
338 28, 2007 and November 15, 2007 constitutes the process that the Ameren Illinois
339 Utilities intend to use as a participative stakeholder process going forward. (Page
340 3, line 89: “It [the Ameren Illinois Utilities] identifies a process that has been in
341 place to assist in the development of the programs.”) This is not the case. That
342 process was only used to build a common understanding of the development of
343 the Ameren Illinois 2008-2010 Implementation Plan.

344 **Q. What is the proposed Ameren Illinois Utilities’ stakeholder participative**
345 **process?**

346 A. Our intent is to work with stakeholders to define workable stakeholder processes
347 for portfolio design, portfolio implementation, and portfolio evaluation. In
348 addition, the Ameren Illinois Utilities (in a separate docket) are seeking approval
349 from the Commission to initiate a natural gas energy efficiency portfolio. Ideally,
350 the stakeholder participative process would address both electric and natural gas
351 energy efficiency issues.

352 **Q. What are other factors that may influence the stakeholder participative**
353 **process for the Ameren Illinois Utilities’ implementation plan?**

354 A. There are at least two significant factors to assess in determination of the
355 appropriate stakeholder process to guide the implementation of the Ameren
356 Illinois Utilities’ first implementation plan. One factor is the need for a timely
357 process that will enable the Ameren Illinois Utilities to offer energy efficiency
358 products and services to their customers as soon as possible, beginning in 2008.
359 The Act requires that the Ameren Illinois Utilities reduce load by 0.2% in 2008
360 and, equally important, we know our customers are looking for help in better
361 managing their electricity consumption. Second, the collaborative process must
362 be tailored such that it is cost-effective, also in accordance with the Act’s goals.

363 **Q. Is Mr. Crandall’s proposal consistent with those considerations?**

364 A. Not explicitly so, and the testimony suggests that it may in fact be inconsistent.
365 The stakeholder advisory process proposed by NRDC witness Henry Henderson
366 and further developed by Mr. Crandall is “...time-consuming and resource

367 intensive if participants are to provide meaningful and thoughtful input.” (NRDC
368 Ex. 1.0, p. 15.) Further, the stakeholder advisory process as proposed by Mr.
369 Crandall may be cost-prohibitive, given annual budget limits. For example, Mr.
370 Crandall proposes engaging a facilitator to provide technical expertise to the
371 stakeholder group. He further proposes an additional technical working
372 group/advisory board consisting of energy efficiency and program
373 implementation experts. Additional resource requirements include: development
374 of a demand-side stakeholder process web site, development of a comment
375 tracking and response system, and an annual stakeholder process. Significant
376 resources would be necessary to support this type of a process – both in terms of
377 hiring additional contractors and in developing new systems. Given the annual
378 energy efficiency budget limits specified in the Act, it is obvious: the more
379 money that is spent on administrative matters, the less money there is to
380 implement energy efficiency programs for customers.

381 **2. EM&V Contractor Dismissal**

382 **Q. Please explain Mr. Crandall’s recommendation for evaluation, measurement**
383 **and verification.**

384 A. I do not believe Mr. Crandall states what his recommendation is. He does,
385 however, state that he disagrees with the Ameren Illinois Utilities’ request to
386 unilaterally dismiss the evaluator contractor under the terms of the contracts
387 signed with the contractor.

388 **Q. Do you agree with this recommendation?**

389 A. No. Mr. Crandall states that this process may lead to evaluation results that lack
390 independence and credibility. Regardless how Mr. Crandall reached that
391 conclusion, the Ameren Illinois Utilities will certainly work with stakeholders, as
392 Mr. Crandall suggests, to insert a safeguard in the process of engaging an EM&V
393 contractor – such that the contractor cannot be unduly influenced by the
394 contracting utility.

395 **3. Reallocation of funds**

396 **Q. Please explain Mr. Crandall’s recommendation for reallocating funds among**
397 **the programs, as needed.**

398 A. While Mr. Crandall appears to agree with the reasonableness of the request of the
399 Ameren Illinois Utilities for flexibility to reallocate funds among programs based
400 on performance, he also states that it is important that the relative share of funds
401 assigned to specific sectors (residential, commercial, and industrial) remain
402 approximately proportionate to the proposed levels in the plan.

403 **Q. Do you agree with this recommendation?**

404 A. I certainly agree with Mr. Crandall’s endorsement of budget flexibility. However,
405 I do not understand Mr. Crandall’s view that it is important that the relative share
406 of funds assigned to specific sectors remain approximately proportionate to the
407 proposed levels in the plan.

408 **Q. Please explain.**

409 A. The Act requires that the Ameren Illinois Utilities energy efficiency portfolio
410 “represent a diverse cross-section of opportunities for customers of all rate classes

411 to participate in the programs.” Our plan does that. However, the Act also
412 requires that we meet specific annual energy savings goals. To the extent that
413 significant market barriers exist to implementing energy efficiency measures in a
414 certain customer sector and those same barriers do not exist in other customer
415 sectors, Mr. Crandall’s recommendation may limit the Ameren Illinois Utilities’
416 ability to reallocate resources to customer sectors with greater market acceptance
417 of energy efficiency products and services in order to meet our annual energy
418 savings goals.

419 **4. Statewide Branding /Customer Education**

420 **Q. Please explain Mr. Crandall’s recommendation for creating a uniform**
421 **energy efficiency program that is easily identifiable to customers throughout**
422 **the state.**

423 A. Mr. Crandall states that branding is an important part of the long-term success of
424 this program. According to Mr. Crandall, the energy efficiency programs of the
425 Ameren Illinois Utilities, ComEd and DCEO would be enhanced by a unified
426 brand and marketing campaign, supported by all three. This campaign would
427 involve hiring celebrities and well known personalities to increase public
428 awareness and participation.

429 **Q. Do you agree with this recommendation?**

430 A. Not at this time. Mr. Crandall’s testimony provided no support to conclude that
431 statewide branding would be a cost-effective way to increase public awareness
432 and participation. To justify such a program, one would need to show that the

433 value is commensurate with cost. Further, I understand that very few states use a
434 statewide brand to promote energy efficiency programs. I understand that
435 California, one of those states, has an annual operating budget to maintain its
436 brand in the \$20 million range.

437 **Q. Do you agree that branding is important?**

438 A. Yes. However, there is nothing to suggest that the Ameren Illinois Utilities’
439 brand would be less effective to the long-term success of their energy efficiency
440 portfolio than a state brand.

441 **Q. Do you agree that customer education and awareness is important?**

442 A. Yes. But again, any customer education and awareness initiatives must be
443 examined from a cost-effectiveness perspective. I see nothing in Mr. Crandall’s
444 testimony that would support such an analysis. For example, Mr. Crandall’s
445 testimony states that “large screen plasma televisions use up to six times the
446 amount of energy of an older-style CRT television,” and suggests that customer
447 education and statewide branding would minimize sales of plasma televisions.
448 But Mr. Crandall offers no evidence that would show: (1) how much such a
449 program would cost, (2) whether customer education initiatives are successful in
450 discouraging people from buying plasma televisions, or (3) what overall usage
451 growth reduction such a program would be expected to achieve. These are the
452 types of issues that would need to be analyzed before incorporating such a
453 program into the Ameren Illinois Utilities’ Plan.

454

455 **5. Implementation Schedule**

456 **Q. Please explain Mr. Crandall’s recommendation regarding the**
457 **implementation schedule for the programs.**

458 A. Mr. Crandall’s testimony is that the residential lighting and appliance program as
459 well as the residential new HVAC incentive programs should be ready to go as
460 soon as the Commission files a final order in this case.

461 **Q. Do you agree with Mr. Crandall’s recommendation?**

462 A. No. It seems inherently inconsistent with Mr. Crandall’s discussion on the need
463 for extensive stakeholder advisory processes, the requirements for an EM&V
464 contractor, the need for financial controls and accounting systems, the need for
465 trade ally coordination, training and relationship building, the need for a statewide
466 branding initiative, and the need for a customer education and awareness
467 campaign. All of these factors prevent these programs from being “ready to go.”

468 **6. Statewide Studies/Illinois DEER Equivalent**

469 **Q. Please discuss Mr. Crandall’s recommendation that the Ameren Illinois**
470 **Utilities conduct a series of statewide studies, including an energy efficiency**
471 **and load management potential study, preferably in conjunction with a**
472 **university or other organization.**

473 A. Mr. Crandall suggests that the Ameren Illinois Utilities conduct a series of market
474 assessment studies, a technical energy efficiency and load management study and
475 the creation of an Illinois DEER equivalent database. The Ameren Illinois

476 Utilities agree that there are a number of market assessment studies that need to
477 be done to assist in the design and development of additional programs. Market
478 assessment work (including appliance saturation surveys, market shares,
479 distribution of commercial building types, current building management practices
480 etc.) provide important, useful information. Some of the other work, specifically
481 technical potential studies and the creation of an Illinois-equivalent DEER
482 database, may have more value in keeping consultants fully employed than in
483 delivering cost-effective energy efficiency programs to Illinois customers.

484 **Q. Please explain your view on whether a technical potential study is**
485 **appropriate.**

486 A. A technical potential study is the theoretical maximum amount of energy use that
487 could be displaced by efficiency, disregarding all non-engineering constraints
488 such as cost-effectiveness and the willingness of end-users to adopt efficiency
489 measures. It is often estimated as a “snapshot” in time, assuming immediate
490 implementation of all technologically feasible energy saving measures, with
491 additional efficiency opportunities assumed as they arise from activities such as
492 new construction.

493 As a person experienced in energy efficiency program planning and analysis, I
494 have not relied upon a technical potential study for program design or
495 implementation planning. It is important to understand the inherent modeling
496 assumptions that go into a technical potential study, and the associated costs. A
497 technical potential study for the Ameren Illinois Utilities would cost at least
498 \$100,000.

499 **Q. Please explain your view on the need, or lack thereof, to create an Illinois**
500 **DEER database equivalent.**

501 A. Conceptually, I agree with Mr. Crandall's recommendation. We are grateful that
502 California took the initiative at considerable time and expense to develop the
503 DEER database. We are even more grateful that they have made it available to
504 all. My understanding is that the creation of the DEER database was a multi-year
505 effort with a multi-million dollar budget. I understand how the Illinois-equivalent
506 DEER database would be used and useful in determining the cost-effectiveness of
507 energy efficiency measures and programs. However, the key issue is whether the
508 Illinois-specific energy efficiency load reduction values are materially different
509 than those in California. In other words, would the cost to develop an Illinois
510 equivalent of the DEER database be commensurate with the value to Illinois
511 customers? Mr. Crandall's testimony does not provide an answer.

512 **7. Percentage of Gross Operating Revenue**

513 **Q. Are there any other issues with Mr. Crandall's testimony that you will**
514 **address?**

515 A. Yes. On page 3, lines 77-84 of his testimony, Mr. Crandall states that the Ameren
516 Illinois Utilities propose to spend less than 0.5% of its gross operating revenue on
517 its energy efficiency and demand response portfolio. This is simply inaccurate.
518 The correct calculation is as follows:

Grand Total (AIU + DCEO)	Spend as a % of Gross Operating Revenue
\$13,312,930	0.48%
\$27,707,272	0.91%
\$42,675,245	1.35%

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It is important that Mr. Crandall recognize that the Ameren Illinois Utilities fund both their own and the DCEO energy efficiency portfolios for the benefit of the Ameren Illinois Utilities customers.

523

Q. Why is the Ameren Illinois Utilities energy efficiency budget as a percent of gross revenue important?

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A. By underestimating this percentage, Mr. Crandall attempts to show that the

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Ameren Illinois Utilities' energy efficiency budget is relatively modest compared to other utilities and is therefore reasonably achievable.

527

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Q. Is Mr. Crandall correct?

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A. No. As previously stated, the Ameren Illinois Utilities will be among the state leaders in per capita spending on energy efficiency programs, according to the ACEEE State of Energy Efficiency Scorecard – 2006. The ACEEE Scorecard indicates that a total of 10 states spent more than \$10 per capita on ratepayer-funded energy efficiency programs in 2006. With a total population of approximately 1.2 million electric customers, the per capita spending for the Ameren Illinois Utilities is approximately \$11 in 2008, \$23 in 2009 and \$36 in 2010.

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Q. Why is this significant?

538 A. This shows how aggressive the Ameren Illinois Utilities’ energy efficiency budget
 539 is, relative to the rest of the nation – particularly in light of the fact that the current
 540 leaders in state spending on energy efficiency, such as Vermont, have been
 541 investing heavily in energy efficiency since 1990. The Plan calls for the Ameren
 542 Illinois Utilities to be where Vermont is now, but within three years.

543 **D. Discussion of Testimony by NRDC Witness Henderson**

544 **Q. Did you review the direct testimony of NRDC Witness Henry Henderson,**
 545 **Exhibit 1.0?**

546 A. Yes I did.

547 **Q. Do you agree with his recommendations?**

548 A. The following matrix lists Mr. Henderson’s recommendations and either my
 549 agreement, disagreement or modified agreement with each recommendation

Recommendation	Agree	Disagree	Modified Agree
Add Residential New Construction Program			X
Statewide Energy Efficiency Website			X
Stakeholder Advisory Process			X
EM&V		X	
Regulatory Framework for DSM	X		
Program Incentives		X	

550 **1. Residential New Construction**

551 **Q. Please explain Mr. Henderson’s proposal to add a Residential New**
552 **Construction program.**

553 A. Mr. Henderson proposes a Residential New Construction program, without
554 defining the program elements.

555 **Q. Do you agree with this recommendation?**

556 A. No. A comprehensive Residential New Construction program similar to the
557 Energy Star Homes program does not pass the total resource cost test threshold
558 solely based on electricity savings benefits. However, when the co-benefits of
559 natural gas savings are included in the calculation, the program becomes cost
560 effective with a total resource cost test ratio greater than 1.0. In a separate docket,
561 the Ameren Illinois Utilities are proposing an Ameren Illinois Utilities natural gas
562 energy efficiency portfolio. If the Commission approves the Ameren Illinois
563 Utilities’ proposal for a natural gas energy efficiency portfolio, the Ameren
564 Illinois Utilities expect to revisit the cost-effectiveness of the Residential New
565 Construction program by including the co-benefits of natural gas savings. If the
566 new construction program is determined to be cost-effective, the Ameren Illinois
567 Utilities expect to work with stakeholders to develop a comprehensive program.

568 **2. Stakeholder Advisory Process**

569 **Q. Please explain Mr. Henderson’s proposal to establish a Stakeholder Advisory**
570 **Process.**

571 A. Mr. Henderson proposes the following five process elements:

- 572 1. Process is advisory
573 2. Statewide combined advisory process
574 3. Required notice and comment for certain issues
575 4. Meeting format
576 5. Advisory process and comment period

577 Mr. Henderson makes additional recommendations in Attachment A to his
578 testimony. One significant addition is the requirement for meeting facilitation by
579 an individual accepted by all parties. Another significant addition is the
580 requirement of an annual process review of the stakeholder process by an
581 independent evaluator.

582 **Q. Do you agree with this recommendations?**

583 A. While I believe many of Mr. Henderson’s proposals have merit, there are several
584 that do not. Specifically, the statewide combined advisory process is a concern.
585 The costs versus the value received for meeting facilitation and an annual process
586 review by an independent third party are also concerns.

587 **Q. What is Mr. Henderson’s proposal concerning a statewide advisory process?**

588 A. Mr. Henderson proposes that the Commission authorize the portfolio
589 administrators to seek statewide consistency for the following elements of the
590 demand-side portfolio, and consider others that stakeholders and Commission
591 staff raise: 1. Statewide Energy Efficiency Web Site; 2. Statewide Public Cost-
592 Effectiveness Calculator and inputs; and 3. Statewide Program Tracking and
593 Reporting System.

594 **Q. What are your concerns with Mr. Henderson’s proposal for a statewide**
595 **advisory process?**

596 A. First, the Ameren Illinois Utilities expect to have a fully developed web site
597 listing its energy efficiency and demand response products and services. A state
598 website can simply insert a link to the Ameren Illinois Utilities website, to avoid
599 redundancy. Second, a statewide public cost-effectiveness calculator may also be
600 redundant, because the Ameren Illinois Utilities publish the cost-effectiveness of
601 each of their programs in their demand-side portfolio in the Implementation Plan
602 and will recalculate cost-effectiveness as part of the evaluation, measurement and
603 verification process. Program tracking and reporting systems are program-
604 specific and can vary depending on the back office support systems that each
605 program implementation contractor has in place. Third, while Mr. Henderson
606 appears to urge the Commission to exercise caution with program administrative
607 costs (page 11), Mr. Henderson recommends very prescriptive stakeholder
608 meeting facilitation as well as annual stakeholder process reviews done by an
609 independent third party, which can add significant incremental administrative
610 costs to programs. Mr. Henderson has not demonstrated that the incremental
611 administrative costs with his proposed statewide collaborative processes are
612 commensurate with increased value to Ameren Illinois Utilities’ customers.

613 **3. EM&V Budgeting**

614 **Q. What is Mr. Henderson’s proposal concerning evaluation, measurement and**
615 **verification (“EM&V”)?**

616 A. Mr. Henderson recommends that the ICC rule that the EM&V budget can only be
617 spent to document impacts.

618 **Q. Do you agree with Mr. Henderson’s testimony regarding how the 3%
619 evaluation, measurement and verification budget should be spent?**

620 A. No. There are two key objectives of energy efficiency and demand response
621 program evaluations. One is to document the effects of a program in order to
622 determine how well it has met its efficiency goals with respect to being a reliable,
623 clean and cost-effective energy resource that Mr. Henderson endorses. The other
624 is to understand why those effects occurred (or did not occur) and identify ways to
625 improve current programs and select future programs. I submit that both
626 objectives are equally important and demand equal treatment. The “Model
627 Energy-Efficiency Program Impact Evaluation Guide,” published by the National
628 Action Plan for Energy Efficiency (Ameren Ex. 7.2) is in lock-step agreement
629 with the perspective that I describe.

630 **Q. What is Mr. Henderson’s testimony regarding program incentives?**

631 A. On page 11, line 242 of his testimony, Mr. Henderson states “In general, the more
632 money allocated to incentives, the more successful the program will be.”

633 **Q. Do you agree with this statement?**

634 A. It depends on how the term “successful” is defined. If “successful” is defined as
635 short-term load reductions, then I agree with Mr. Henderson’s statement. If
636 successful is defined as long-term, sustainable load reductions, then I disagree
637 with Mr. Henderson.

638 **Q. Please explain.**

639 A. I cite the “Compact Fluorescent Lighting in America: Lessons Learned on the
640 Way to Market” study prepared by the Pacific Northwest National Laboratory for
641 the U.S. Department of Energy Efficiency and Renewable Energy Building
642 Technologies Program in June 2006 (Ameren Ex. 7.3) to illustrate my point(s).
643 The study, which reviewed CFL incentive practices across the nation beginning in
644 the 1980’s made these observations regarding program design:

- 645 1. Avoid give-aways and programs that obscure retail price, leading to sticker
646 shock when consumers return for repeat purchase.
- 647 2. Avoid the short-term fix of a rebate unless it is tied to an overall campaign
648 that includes an education campaign.

649 Simply put, a key objective of the Ameren Illinois Utilities’ proposed portfolio of
650 energy efficiency programs is to lay the groundwork for market transformation for
651 energy efficiency products and services such that customers can take control of their
652 energy management decisions. This requires much more than increasing incentives to
653 achieve greater short-term program participation.

654 **III. CONCLUSION**

655 **Q. Does this conclude your rebuttal testimony?**

656 A. Yes. It does.