

ILLINOIS COMMERCE COMMISSION

DOCKET NO. _____

DIRECT TESTIMONY

OF

JAMES C. BLESSING

Submitted On Behalf

Of

CENTRAL ILLINOIS LIGHT COMPANY d/b/a AMERENCILCO

CENTRAL ILLINOIS PUBLIC SERVICE COMPANY d/b/a AMERENCIPS

ILLINOIS POWER COMPANY d/b/a AMERENIP

(THE AMEREN ILLINOIS UTILITIES)

OCTOBER 26, 2007

23 selection of Levitan & Associates, Inc. to act as the procurement administrator on their
24 behalf.

25 **PROCUREMENT PLAN DOCUMENT**

26 **Q. What is the procurement plan?**

27 A. The procurement plan is a document that analyzes the projected supply and
28 demand for the Utilities' eligible retail customers over a five-year period starting June 1,
29 2008. It also identifies the specific wholesale purchases that the Utilities will procure
30 following approval of the plan by the Illinois Commerce Commission. The required
31 content of the procurement plan is specified in Section 16-111.5 (b) of the Public Utilities
32 Act ("PUA"). This particular procurement plan is being filed in accordance with Section
33 16-111.5(j), which statute incorporates by reference Section 16-111.5(b). The plan is
34 attached to my testimony as Ameren Exhibit 2.1.

35 **Q. Please provide an overview of the Utilities procurement plan document.**

36 A. The Utilities procurement plan document consists of the four primary sections as
37 follows.

- 38 I. Introduction and Overview
- 39 II. Load Forecast
- 40 III. Portfolio Design
- 41 IV. Procurement Administrator

42 The introduction and overview section provides a brief description of the Illinois Power
43 Agency Act and certain modifications to the PUA that were signed into law by Governor
44 Rod Blagojevich on August 28, 2007, including a one time obligation of the Utilities to
45 acquire power supply resources for the June 1, 2008 through May 31 2009 planning

46 period pursuant to Section 16-111.5(j). The load forecast section discusses the process
47 used to develop the five-year peak demand and energy forecast of the eligible retail
48 customer load. The portfolio design section describes the process utilized by the Utilities
49 in arriving at the portfolio of energy, capacity and renewable energy resources that will
50 be procured for the June 1, 2008 through May 31, 2009 planning period. Finally, the
51 procurement administrator section identifies the firm the Utilities have hired to act as the
52 procurement administrator to complete the final design and implementation of the
53 procurement process.

54 **Q. Section III.D(1) of the Utilities procurement plan shows the list of standard**
55 **energy products that will be procured as part of the request for proposal process.**
56 **Is that correct?**

57 A. Yes.

58 **Q. How did the Utilities arrive at this portfolio of energy products?**

59 A. As discussed in greater detail in the procurement plan, the Utilities utilized a
60 simulation model populated with 250 scenarios of hourly load and hourly market prices
61 to test various supply portfolios. This analysis attempts to answer the key question of
62 “how much of the energy supply should be hedged with forward contracts and how much
63 should be subject to the MISO spot market prices.” The resulting portfolio should strike
64 an appropriate balance between two competing objectives: 1) minimizing the overall
65 expected cost to serve the eligible retail customer load and 2) minimizing the volatility of
66 that expected cost.

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68

69 **Q. Please provide an overview of this analysis.**

70 A. The analysis was completed in two phases. In the initial phase, the objective was
71 to gain an understanding how hedging with forward contracts affects the expected energy
72 cost to serve the load and also how hedging with forward contracts affects the volatility
73 of that expected energy cost. The objective of the second phase of analysis was to arrive
74 at the specific standard market products that will be procured in the procurement process.

75 **Q. Please describe how the first objective was reached.**

76 A. To accomplish this objective, the analysis of how much to hedge with forward
77 contracts for the 12 month period starting June 1, 2008 was broken into 24 independent
78 analyses, one for each of the 12 monthly on-peak periods and one for each of the 12
79 monthly off-peak periods. In each analysis the simulation model tested portfolios
80 ranging from a portfolio that includes no forward contracts (100% of the load priced at
81 the spot market price) to a portfolio of forward contracts in excess of two times the
82 average load in every hour of the period.

83 **Q. What are the results of this initial phase of the analysis?**

84 A. This initial phase of the analysis demonstrated two relationships. First, the results
85 of the simulation model show that adding forward contracts has no impact on the
86 expected cost to serve the load. This result is driven by an assumption in the model that
87 there is no price premium on forward purchases relative to the expected spot market
88 prices. While the Utilities believe there likely is a price premium that exists in the
89 markets, no premium was included in the model because there is insufficient market data
90 to calculate the magnitude of such a premium. As will be discussed later, the Utilities
91 attempted to account for the possible existence of a premium on forwards outside the

92 construct of the simulation model. Second, the results show that the volatility of the
93 expected cost is minimized when the portfolio includes forward contracts at a level close
94 to the average load in each period. This relationship is more pronounced in the on-peak
95 periods as compared to the off-peak periods. Intuitively, it makes sense that the volatility
96 of a portfolio that includes fixed price forward purchases at a level very close to the
97 expected load would be less than a portfolio that includes a greater dependency on
98 variably priced spot market purchases (forward purchases less than expected load), or a
99 portfolio that includes a greater dependency on variably priced spot market sales (forward
100 purchases more than expected load). When considering both of these relationships
101 together, a portfolio that includes forward contracts at a level relatively close to the
102 average load in each period provides the Utilities eligible retail customers price stability
103 with no increase in the expected energy cost to serve the load as compared to a portfolio
104 that does not include forward contracts.

105 **Q. Please describe the second phase of the analysis.**

106 A. As stated previously, the objective of the second phase of the analysis was to
107 arrive at the specific standard market products that will be procured in the procurement
108 process. In doing this, the types of products that are routinely traded in the wholesale
109 market were considered. For example, it is more common to see the months of July and
110 August traded as a combined July-August product, than to see them traded as
111 independent months. The same is true for October, November and December, the
112 product commonly traded is Q4 (fourth quarter). With this in mind, the 24 monthly on-
113 peak and off-peak blocks were consolidated into a smaller number of standard market
114 products. Multiple portfolios of standard market products were developed and tested

115 using the simulation model. The results for each were compared to those of the average
116 load portfolio that was produced in the initial phase of analysis. The comparison showed
117 that consolidating the 24 monthly on-peak and off-peak blocks into a smaller number of
118 standard market products has only a minimal effect on the volatility of the expected cost
119 to serve the load. As a final step, the Utilities attempted to account for the possibility that
120 there is a price premium on forward purchases relative to the expected spot market prices.
121 This was accomplished by looking at how the final portfolio selection might change if it
122 was assumed that the magnitude of this premium is 5.0%. As stated earlier, while the
123 Utilities believe there likely is a premium that exists in the market, the Utilities do not
124 believe that there is sufficient data available to determine the magnitude of the premium.
125 The 5.0% value the Utilities considered is simply a hypothetical scenario that was used in
126 an attempt to account for the likely existence of a premium. The Utilities proposed mix
127 of standard energy products can be found in Section III.D (1) of the procurement plan.

128 **Q. The procurement plan also states the forward contracts that will be utilized**
129 **to hedge the energy needs will be financial swaps rather than physical transactions.**

130 **What is a financial swap?**

131 A. A financial swap is a commercial transaction where there is no exchange of
132 physical energy between the parties, and consequently no delivery of that energy to a
133 delivery point. What is exchanged is price risk. In this case, the Utilities are exchanging
134 a price that varies over time (MISO spot market prices) for a fixed price. To illustrate
135 this concept let's look at the existing 400 MW financial Swap that the Utilities entered
136 into consistent with Section 16-111.5 (k) of the PUA. The terms of that agreement
137 requires, for the period June 1, 2008 through December 31, 2008, the Utilities to pay a

138 fixed price of \$47.45/MWh and Ameren Energy Marketing Company (“AEM”) to pay
139 the MISO real-time Locational Marginal Price (“LMP”) at the Ameren Illinois Utilities
140 Load Zone. The way this agreement will settle is that in every hour during the term, the
141 MISO real-time LMP at the Ameren Illinois Utilities Load Zone will be compared to the
142 \$47.45/MWh fixed price. In every hour that the LMP exceeds the fixed price AEM will
143 pay to the Utilities the difference in price times the contract quantity of 400 MW and in
144 every hour that the LMP is less than the fixed price, the Utilities will pay to AEM the
145 difference in price times the contract quantity. So, if the LMP in a specific hour was \$60
146 then AEM would make a payment to the Utilities of \$5,020 [(\$60/MWh - \$47.45/MWh)
147 * 400 MW]

148 **Q. If there is no exchange of physical energy between the parties, then how are**
149 **the energy needs of the load served?**

150 A. The load is served through the MISO day-ahead and real-time energy markets.
151 The financial swap is simply a method of hedging the final price.

152 **Q. You said that the load will be served in the day-ahead and real-time energy**
153 **markets. What does this mean?**

154 A. The MISO utilizes a centralized security constrained dispatch system to
155 economically dispatch the approximately 127,000 MW of generation within its footprint
156 to serve the MISO footprint load in every hour. In short, the day-ahead market is a
157 forward market, while the real-time market is a balancing market. Any deviation in real-
158 time from the positions cleared day-ahead are settled with MISO at real-time prices. If
159 you cleared generation day ahead and don't generate electricity in real time, you
160 effectively buy back your position at real-time LMP. Similarly, if you cleared load day-

161 ahead, but your forecast was either high or low, you must buy or sell the variance at real-
162 time LMP.

163 The Utilities will submit a best effort day-ahead forecast to MISO in the form of
164 what MISO calls a demand bid. This results in the quantity of energy for each hour that
165 is contained in the demand bid being cleared in the day-ahead market and priced at the
166 day-ahead energy price. Any difference in the quantities contained in the demand bid
167 and the actual quantities used by our customers will be priced at the real-time energy
168 price and subject to Revenue Sufficiency Guarantee (“RSG”) charges.

169 **Q. So let me make sure I have this straight, the energy needs of the load are**
170 **being served by MISO and the Utilities are paying MISO for that energy at either**
171 **the day-ahead or real-time price.**

172 A. Yes.

173 **Q. The Utilities are also entering into financial swap contracts with suppliers to**
174 **hedge the MISO market price risk. Based on this, what is the price that the Utilities**
175 **pay for their energy they require to serve the customer load?**

176 A. The best way to answer this question is to walk through another example. Let’s
177 start with the 400 MW financial swap discussed previously. In that example, the Utilities
178 were exchanging MISO real-time energy prices that vary by hour for a fixed price of
179 \$47.45/MWh. And, in that example we considered an hour in which the real-time LMP
180 was \$60/MWh which resulted in a \$5,020 payment from the supplier to the Utilities.
181 Let’s also assume the Utilities submitted a demand bid for that hour of 405 MW and the
182 actual load turned out to be 410 MW in that hour. Finally, assume the day-ahead price
183 for that hour was \$61/MWh and the RSG charge was \$2/MWh. For that hour the

184 Utilities would pay MISO \$24,705 [405 MW * \$61/MWh] for the day-ahead energy and
185 \$310 [(410 MW- 405 MW) * (\$60/MWh + \$2/MWh)] for the real-time energy. In this
186 example, the Utilities will pay MISO a total of \$25,015 for this hour but will receive a
187 payment from AEM of \$5,020, resulting in a net cost of \$19,995 or \$48.76/MWh for the
188 410 MW of energy required to serve the load. This occurs despite the fact that the MISO
189 day-ahead and real-time energy prices were \$60/MWh and \$61/MWh, respectively.

190 **Q. If your hedge for the load was at \$47.45/MWh, then why did the average**
191 **price end up being more than \$1/MWh higher?**

192 A. There are a couple of things happening here that cause the average actual price in
193 this example to be higher than the hedge price. First, the hedge was for 400 MW and the
194 actual load turned out to be 410 MW. This results in the extra 10 MW being priced at the
195 higher MISO energy market prices. Second, the hedge that is in place is linked to the
196 MISO real-time energy prices but in order to minimize exposure to RSG charges, we are
197 serving most of the energy from the MISO day-ahead energy prices. This results in the
198 average actual price reflecting the \$1/MWh difference between the MISO day-ahead and
199 real-time prices.

200 **Q. If that is the case, then should the Utilities structure future financial swap**
201 **contracts so that the Utilities are exchanging the MISO day-ahead energy price for**
202 **the fixed price instead of the real-time price?**

203 A. Structuring the financial swap with the MISO day-ahead energy price as the
204 floating component would likely create a better hedge for the Utilities if price stability
205 were the only criteria to be considered. But there is a cost to structuring future financial
206 swap contracts in this manner. Transactions that are occurring in the market are

207 dominated by those structured with the MISO real-time price as the float component.
208 Despite this, the Utilities could structure their products using the day-ahead price. But it
209 is likely that in so doing, the product would be less attractive in the market which could
210 result in less competition in the procurement process. In addition, if the day-ahead price
211 was used, it is reasonable to expect suppliers would include in the bid price their best
212 estimate of what that differential will be in the future, along with a risk premium to
213 account for the additional uncertainty this would create. Therefore, the fact that the
214 financial swap settles against the MISO day-ahead energy price rather than the MISO
215 real-time energy price is likely to have little, if any, effect on the final price paid by the
216 end use customer.

217 **Q. Section III.D(1) of the procurement plan also shows how the Utilities will**
218 **procure the capacity they require to serve the load of their eligible retail customers.**
219 **Is that correct?**

220 A. Yes.

221 **Q. If the energy is being served from the MISO energy markets, why is capacity**
222 **required?**

223 A. Capacity is required to ensure reliable service to our customers and is mandated
224 by the Southeastern Electric Reliability Council (“SERC”) and MISO. The MISO Open
225 Access Transmission and Energy Markets Tariff (“MISO Tariff”) requires market
226 participants who serve load in MISO, to demonstrate that they own or have purchased an
227 amount of capacity equal to their expected peak load plus the appropriate level of
228 planning reserve as set by its regional reliability organization, which for the Utilities is
229 SERC. If the Utilities did not procure capacity to meet this requirement, they would be in

230 violation of the MISO Tariff which is under the jurisdiction of the Federal Energy
231 Regulatory Commission.

232 **Q. This section of the procurement plan shows that the Utilities intend to**
233 **procure in the RFP process the full 100% of their capacity requirement in the four**
234 **summer months of June through September but only 90% of the needs in the non-**
235 **summer months. Please explain the rationale for this.**

236 A. As I said earlier, the Utilities are required to purchase the required capacity to
237 remain in compliance with the MISO Tariff. Because the MISO does not have a formal
238 capacity market at this time, the Utilities will need to procure the capacity in the bi-lateral
239 markets either through a formal RFP process or through a less formal competitive
240 procurement process.

241 The bi-lateral capacity markets are tightest in the months of June through
242 September when load is at or close to its annual peak. During these summer months, if
243 the load is high as a result of extreme temperatures and demands on the system, and there
244 are more generating units unavailable than expected, it may not be possible to purchase
245 capacity in the market at any price. To ensure the Utilities have sufficient capacity to
246 serve the load during the summer months, the Utilities will procure 100% of their
247 capacity requirement via the RFP process in advance of the summer. In the non-summer
248 months, capacity is generally more plentiful. For this reason, the Utilities will procure
249 only 90% of each month's capacity requirement via the RFP process. The remaining
250 capacity will be procured on a month-ahead basis using a less formal competitive
251 procurement process as defined in the Procedures for Balancing Loads section of the
252 procurement plan. By procuring only 90% of the requirement in advance and the

253 remaining requirement on a month ahead basis, the chances of over-procuring capacity is
254 minimized. This is important to note because it is unlikely that the Utilities, if faced with
255 an oversupply of capacity, would be successful in finding a buyer for this excess capacity
256 in the non-summer months.

257 **Q. Sections III.E(2) of the procurement plan discuss the products that will be**
258 **procured to satisfy the renewable portfolio standard included in the Illinois Power**
259 **Agency Act. Is that correct?**

260 A. Yes

261 **Q. This section of the procurement plan states that the Utilities intend to**
262 **procure renewable energy credits (“RECs”) without the energy associated with**
263 **those RECs. Please describe the rationale for this approach.**

264 A. This approach, to purchase RECs only rather than energy plus the RECs, was
265 selected for the following reasons. First, it is believed a RECs only product will be
266 viewed more favorably by wider range of market participants which should translate into
267 a more competitive procurement process. By procuring a RECs only product, a
268 renewable energy resource who has already committed to sell the energy from their
269 facility to a third party would be able to bid the RECs which they still possess into the
270 Utilities procurement process. Second, to the extent that it would be required to procure
271 renewable energy resources from facilities outside the MISO footprint, purchasing RECs
272 only avoids the added complexity of ensuring that the energy can physically be delivered
273 to the load, which would require the seller to arrange for firm point-to-point transmission
274 service from the facility to the MISO border. Finally, by purchasing the RECs only, the
275 Utilities do not take on the added risk that can be associated with the purchase of energy

276 from a renewable energy resource. For example, if the Utilities were to purchase energy
277 from a wind resource, the Utilities would need to find a way to forecast the amount of
278 energy that the facility would deliver in each hour and factor that into the day-ahead
279 demand bids the Utilities submit to MISO each day. To the extent that the renewable
280 energy forecast was incorrect, this forecast error could result in a larger portion of the
281 Utilities energy needs being served in the MISO real-time markets, which would result in
282 an increase in MISO RSG charges.

283 **Q. Does the procurement plan discuss how bids received in the RFP process,**
284 **which could be from a wide range of renewable technologies and from both Illinois**
285 **and non-Illinois renewable energy resources, will be evaluated?**

286 A. Yes, it does. Section 1-75(c) of the Illinois Power Agency Act (“IPA Act”) lays
287 out three general criteria that should be considered when evaluating the bids received.
288 First, the renewable energy resources procured need to be cost-effective as defined in the
289 IPA Act. Second, to the extent available, at least 75% of the renewable energy resources
290 should come from wind generation. Finally, through June 1, 2011, renewable energy
291 resources should be procured, to the extent available, from facilities located within the
292 state of Illinois and that purchases from facilities located outside the state may only be
293 used to satisfy the requirement to the extent that in-state resources are not available. The
294 evaluation criteria included in the plan conform to these three requirements.

295 **Q. Does the procurement plan comply with the requirement of the IPA Act?**

296 A. Yes, the procurement plan conforms in all material respects with regard to those
297 requirements laid out in Section 16-111.5(b) of the PUA.

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PROCUREMENT ADMINISTRATOR

300 **Q. Section IV of the procurement plan discusses the Utilities selection of Levitan**
301 **& Associates, Inc. to act as the procurement administrator. Is that correct?**

302 A. Yes.

303 **Q. Please describe the selection process used by the Utilities to select Levitan &**
304 **Associates, Inc. as their Procurement Administrator.**

305 A. Section 16-111.5 (j) of the PUA requires the Utilities to file, as part of their
306 procurement plan, the identity of their proposed procurement administrator, who shall
307 have the same experience and expertise as is required of a procurement administrator
308 hired pursuant to Section 1-75 of the IPA Act. Section 1-75 (a) (2), of IPA Act defines
309 those requirements. The Utilities developed an RFP for consulting services to act as the
310 procurement administrator for the Utilities and issued it to 12 potential candidates on
311 August 17, 2007. Of the 12 candidates, five submitted bids to the RFP on or before the
312 due date. These five bids were evaluated using the matrix included in Section IV.C of the
313 procurement plan and the Utilities subsequently selected and hired Levitan and
314 Associates, Inc. ("Levitan") to act as their procurement administrator.

315 **Q. Does Levitan meet all the requirements included in Section 1-75 of the IPA**
316 **Act?**

317 A. The Utilities believe Levitan does meet those requirements and is capable of
318 performing the duties of the procurement administrator. The Levitan team has in excess
319 of 20 years of relevant experience including experience with large scale competitive
320 procurement processes for the Connecticut Department of Public Utility Control and the
321 Long Island Power Authority. Members of the Levitan team assigned to this project have

322 advanced degrees in economics, energy economics, engineering, finance and geological
323 sciences. A complete list of Levitan's qualifications can be found in their RFP bid which
324 is included as Appendix C of the procurement plan.

325 **Q. Does this conclude your direct testimony?**

326 A. Yes.

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APPENDIX A

EDUCATION AND WORK EXPERIENCE OF JAMES C. BLESSING

My educational background consists of a Bachelor of Science degree in Electrical Engineering from the University of Missouri-Rolla in 1988 and a Masters in Business Administration degree from St. Louis University in 1998. My work experience started as an Electrical Project Engineer for Southern Indiana Gas & Electric Company in October of 1988. In 1992, I accepted a position with the Power Generation Services Division of General Electric Company as a Field Engineer. In 1994, I left General Electric Company to accept a position with Union Electric Company as a Plant Engineer at the Labadie Power Plant. In 1999, I transferred to Ameren Services ' Corporate Planning Department where I held the position of Consulting Planning Engineer. On January 1, 2004, I was promoted to the position Director of Resource Acquisition. On October 15, 2004, my position was transferred to the Strategic Initiatives Department and my title was changed to Managing Supervisor, Power Supply Acquisition. On April 1, 2007, I was promoted to my current position of Manager, Power Supply Acquisition. The duties of my current position consist of procuring power supplies for Ameren Corporation's regulated utilities in Illinois and administering the contracts that result.