

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS)
 POWER & LIGHT COMPANY REQUESTING)
 THE INDIANA UTILITY REGULATORY)
 COMMISSION TO APPROVE AN)
 ALTERNATIVE REGULATORY PLAN)
 PURSUANT TO IND. CODE § 8-1-2.5-1, *ET SEQ.*,)
 FOR THE OFFERING OF ENERGY)
 EFFICIENCY CONSERVATION, DEMAND)
 RESPONSE AND DEMAND-SIDE)
 MANAGEMENT PROGRAMS AND)
 ASSOCIATED RATE TREATMENT)
 INCLUDING INCENTIVES IN ACCORDANCE)
 WITH IND. CODE §§ 8-1-2.5-1 *ET SEQ.* AND 8-1-)
 2-42(a); AUTHORITY TO DEFER PROGRAM)
 COSTS ASSOCIATED WITH ITS ENERGY)
 EFFICIENCY PORTFOLIO PROGRAMS;)
 AUTHORITY TO IMPLEMENT NEW AND)
 ENHANCED ENERGY PROGRAMS AND)
 APPROVAL OF MODIFICATION OF THE)
 FUEL ADJUSTMENT CLAUSE EARNINGS)
 AND EXPENSE TESTS.)

CAUSE NO. 43623

INDIANAPOLIS POWER & LIGHT COMPANY'S
SUBMISSION OF SUPPLEMENTAL DIRECT TESTIMONY

Indianapolis Power & Light Company, by counsel, hereby submits the Verified Supplemental Testimony and Exhibits of Witnesses Flora, Haselden, Cutshaw and Soller.

Respectfully submitted,

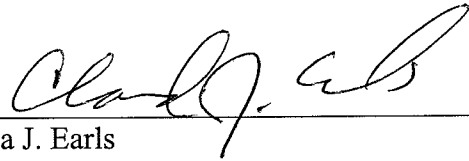


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Attorney for Indianapolis Power & Light Company

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on May 1, 2009, a copy of Indianapolis Power & Light Company's Verified Supplemental Testimony was served by email transmission upon Karol H. Krohn (kkrohn@oucc.in.gov) and Randall C. Helmen (rhelmen@oucc.in.gov), Office of Utility Consumer Counselor, National City Center, 115 W. Washington Street, Suite 1500 South, Indianapolis, Indiana 46204.



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ATTORNEY FOR PETITIONER

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CAUSE NO. 43623

VERIFIED SUPPLEMENTAL TESTIMONY

OF

KEN FLORA

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

**VERIFIED SUPPLEMENTAL TESTIMONY OF
KEN FLORA, DIRECTOR, REGULATORY AFFAIRS
ON BEHALF OF INDIANAPOLIS POWER & LIGHT COMPANY
CAUSE NO. 43623**

1 **Q1. Please state your name, employer and business address.**

2 A1. My name is Ken Flora. I am employed by Indianapolis Power & Light Company (“IPL”
3 or “Company”), One Monument Circle, Indianapolis, Indiana, 46204.

4 **Q2. Are you the same Ken Flora who prefiled Direct Testimony in this Cause on**
5 **February 2, 2009?**

6 A2. Yes.

7 **Q3. What is the purpose of your supplemental testimony in this proceeding?**

8 A3. The purpose of my testimony is to (1) provide an introduction of witnesses that are
9 providing supplemental testimony at this time; (2) provide an update of developments
10 since my direct testimony was filed; and (3) propose a brief delay in IPL’s plan to deploy
11 and recover costs associated with Advanced Metering Infrastructure (“AMI”).

12 **Q4. Who is providing supplemental testimony at this time?**

13 A4. Witness Soller will provide supplemental testimony that discusses the results of the AMI
14 Proof of Concept (“POC”) and describes modifications to the Home Area Network
15 (“HAN”) POC and Time of Use (“TOU”) proposals. Witness Haselden will present
16 modifications to the proposed renewable feed-in tariff in supplemental testimony.
17 Witness Cutshaw will present supplemental testimony and revised Phase I cost recovery
18 schedules to reflect the AMI modifications to the Phase I and Phase II proposals.

1 **Q5. In your direct testimony you indicated that IPL would be conducting an AMI POC.**
2 **Is this AMI POC complete?**

3 A5. Yes. As explained by Witness Soller, the test did not achieve the targeted communication
4 success rate. Therefore, Landis + Gyr, Inc. replaced some test system components and
5 plans to repeat testing steps over a 45-day period.

6 **Q6. Are there any other developments that have the potential to impact your AMI**
7 **proposal?**

8 A6. Yes. There may be an opportunity for federal stimulus funding for smart grid projects, as
9 a result of recent legislation.

10 **Q7. Please describe your understanding of the availability of federal stimulus funding**
11 **for smart grid projects.**

12 A7. The American Recovery and Reinvestment Act (ARRA) which was enacted in February
13 2009, includes \$4.5 billion to stimulate smart grid investment through a sharing
14 mechanism up to 50 percent matching funds. On April 16, 2009, the Department of
15 Energy (DOE) published a draft Funding Opportunity Announcement (FOA) for an
16 aggregate \$651 million of funding for demonstration grants and a Notice of Intent (NOI)
17 for a separate FOA for the balance of unallocated funds through investment grants. The
18 demonstration grant FOA describes regional applicability, includes project timelines of 3
19 to 5 years and includes a minimum per project allocation amount of \$20 million. An
20 application deadline has not yet been determined. The investment grant NOI describes
21 smart grid functionality for utility deployments, includes a 2 year project timeline and a
22 range of per project allocation from \$500,000 to \$20 million. DOE listed application
23 deadlines start as early as July 29, 2009, with two subsequent the deadlines; however,

1 DOE explicitly states that there is no guarantee that funds will be available following the
2 first round of funding allocations.

3 **Q8. How might IPL optimize the federal stimulus funding?**

4 A8. IPL believes that federal stimulus funding, and in particular an investment grant, could
5 reduce costs and/or increase benefits to customers achieved by our Advanced DSM plan.
6 As described by Witness Soller, IPL staff is in the process of evaluating AMI and ways to
7 present near real time data for demand metered customers and possible means to deploy
8 HAN for residential energy only metered customers. The stimulus funding opportunity
9 has prompted IPL to conduct a thorough review of IPL's proposed Advanced DSM
10 project timeline and phased deployment plans.

11 **Q9. Have you decided to modify your DSM plan or timing because of the extended AMI
12 testing and the stimulus funding opportunity?**

13 A9. Yes. IPL intends to move forward with its Core DSM programs but is proposing a brief
14 delay in the current Phase I request to recover costs associated with AMI by removing it
15 from consideration in Phase I to Phase II of this Cause. IPL believes that this brief delay
16 will improve both its AMI project decision quality, and its opportunity to potentially
17 leverage stimulus funding to reduce net project costs to IPL's customers. IPL, in its
18 supplemental testimony previously submitted by Witness Allen on March 12, 2009, has
19 requested an extension of the approval for continued delivery of the current IPL DSM
20 programs on a month-to-month basis after June 30, 2009 until an order is received in this
21 proceeding.

22 **Q10. Are you still proposing to study home area networks ("HAN") and dynamic
23 pricing?**

1 A10. Yes. IPL continues to seek authority to defer, for recovery following their completion
2 through proposed Standard Contract Rider No. 22, the costs of a HAN POC and a Time-
3 of-Use ("TOU") pricing study.

4 **Q11. Are there any changes to your estimates of the costs of these studies at this time?**

5 A11. The cost of the HAN POC continues to be estimated at \$300,000 and the cost of the TOU
6 study continues to be estimated at \$100,000. However, as explained by Witness Soller,
7 IPL also anticipates the need for certain modifications to its customer accounting system
8 to accommodate time-based rates. The current estimate of these costs of \$100,000 was
9 not anticipated or included in IPL's case-in-chief.

10 **Q12. What does IPL request from this Commission?**

11 A12. IPL seeks permission to delay consideration of its requested cost recovery for AMI
12 deployment until Phase II of this proceeding and to defer costs necessary to complete the
13 HAN POC and TOU study up to \$500,000. These deferred costs are proposed to be
14 recovered through IPL's proposed Standard Contract Rider No. 22, coincident with the
15 offering of time-based pricing to our customers.

16 **Q13. Does this conclude your supplemental testimony?**

17 A13. Yes.

VERIFICATION

I, Ken Flora, Director, Regulatory Affairs of Indianapolis Power & Light Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.



Ken Flora

Dated: May 1, 2009

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CAUSE NO. 43623

VERIFIED SUPPLEMENTAL TESTIMONY

OF

JOHN E. HASELDEN

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

SPONSORING PETITIONER'S EXHIBIT JEH-5 (REVISED)

VERIFIED SUPPLEMENTAL TESTIMONY OF
JOHN E. HASELDEN, PRINCIPAL ENGINEER, REGULATORY AFFAIRS
ON BEHALF OF INDIANAPOLIS POWER & LIGHT COMPANY
CAUSE NO. 43623

1 **Q1. Please state your name, employer and business address.**

2 A1. My name is John E. Haselden. I am employed by Indianapolis Power & Light Company
3 ("IPL" or "Company"), One Monument Circle, Indianapolis, Indiana, 46204.

4 **Q2. Are you the same John E. Haselden who prefiled Direct Testimony in this Cause on**
5 **February 2, 2009?**

6 A2. Yes.

7 **Q3. What is the purpose of your supplemental testimony in this proceeding?**

8 A3. The purpose of my testimony is to update Petitioner's Exhibit JEH-5, Rate REP
9 (Renewable Energy Production) to include proposed initial rates and to describe how IPL
10 plans to update Rate REP on a periodic basis. The updated exhibit is attached hereto as
11 Petitioner's Exhibit JEH-5 (Revised).

12 **Q4. Please describe IPL's proposed pricing for the initial offering of Rate REP.**

13 A4. IPL proposes to offer pricing for three types of renewable resources (1) wind, (2) solar
14 and (3) biomass. Wind and solar pricing will be further delineated into tiers related to the
15 maximum output capacity of the facility as shown on Petitioner's Exhibit JEH-5
16 (Revised).

17 **Q5. Why are there tiers based on capacity?**

18 A5. The pricing tiers relate to the economies of scale that larger projects enjoy relative to

1 smaller projects. These economies take the form of lower cost per kW of capacity for
2 larger facilities. In addition, for some technologies, larger facilities have better
3 efficiencies or capacity factors which correspond to lower production costs.

4 **Q6. What factors were taken into account to arrive at the proposed rates?**

5 A6. IPL considered many factors, including:

- 6 • Federal investment tax credits
- 7 • Tax effects of accelerated depreciation
- 8 • IPL's proposed Renewable Energy DSM incentives
- 9 • Renewable Energy Credits (RECs) value
- 10 • Estimates of reasonable outputs for projects based on their technology
- 11 • Project life
- 12 • Discount rate for net present value calculations
- 13 • Operations and maintenance costs
- 14 • Capital costs based on project size

15
16 **Q7. How did IPL arrive at the proposed rates?**

17 A7. IPL used a discounted cash flow model wherein a rate was determined such that the net
18 present value (NPV) was close to zero over the project life and the value of a REC was
19 added. This implies the project earns the discount rate over the life of the project.

20 **Q8. Are upgrades to IPL's distribution system included in the pricing? If yes, who pays
21 for the upgrades?**

22 A8. No. It is important to understand that electric utility distribution systems are designed to
23 deliver electricity from generating plants to loads and not necessarily in reverse. Each

1 project will be required to apply for interconnection to IPL's system to assure safety and
2 compatibility. To the extent upgrades are required the customer applicant will be
3 required to fund the upgrades.

4 **Q9. How often does IPL plan to revise the proposed rates in Rate REP?**

5 A9. IPL plans to reevaluate the rates when there are significant changes in the factors listed
6 above or if other considerations come into play. While IPL intends to play a role in
7 encouraging the development of renewable energy, it does not believe it is obligated to
8 offer pricing that assures every project is profitable. IPL should also be prudent to make
9 sure the pricing does not create a windfall opportunity for some at the expense of IPL's
10 other customers.

11 **Q10. How does the proposed pricing compare to that which other utilities are offering?**

12 A10. To my knowledge no other utility in Indiana offers special renewable energy pricing
13 which is sometimes called a feed-in tariff ("FIT"). On a national basis, IPL is aware of a
14 few electric utilities who offer the following:

- 15 • Gainesville (FL) Regional Utilities: \$.32/kWh for solar PV less than 25 kW and
16 \$.26/kWh for solar PV greater than 25 kW. Fixed pricing over life of project.
- 17 • Eugene (OR) Water and Electric Board: \$.12/kWh for solar PV.
- 18 • Limited experimental rates by Wisconsin utilities:
 - 19 • Xcel Energy: \$.066/kWh for wind, \$.073/kWh for biomass for projects 20
20 kW to 1 MW. Program capped at 0.25% prior year sales.
 - 21 • Madison Gas & Electric: \$.061/kWh for wind and other renewables,
22 \$.25/kWh for Solar PV up to 10 kW, limited to 300 kW total.
 - 23 • Wisconsin Power & Light: \$.25/kWh for solar PV 1 kW to 20 kW,

1 limited to a program cap of 683 kW; other technologies: \$.12/kWh on-
2 peak and \$.0735/kWh off-peak for systems 20 kW to 1 MW, program
3 capped at 0.5% prior year sales.

4 • We Energies: Biogas by anaerobic digesters: \$.155/kWh on-peak and
5 \$.04/kWh off-peak. Participation capped at 0.5% prior year sales.

6 **Q11. Based upon your review of other utilities' FITs, do you believe IPL's proposed Rate**
7 **REP is reasonable?**


8 A11. Yes.

9 **Q12. Does this conclude your supplemental testimony?**

10 A12. Yes.

VERIFICATION

I, John E. Haselden, Principal Engineer, Regulatory Affairs of Indianapolis Power & Light Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.



John E. Haselden
Dated: May 1, 2009

Indianapolis Power & Light Company
One Monument Circle
Indianapolis, Indiana

I.U.R.C. No. E-16

Original No. XX

RATE REP
RENEWABLE ENERGY PRODUCTION

AVAILABILITY:

Available to any Customer of Indianapolis Power & Light Company (the "Company") that operates within the Company's service territory a Qualifying Renewable Energy Power Production Facility subject to the Company's rules and regulations and, any terms, conditions and restrictions imposed by any valid and applicable law or regulation. This tariff is submitted pursuant to the requirements of the Commission's regulations and shall cease to be effective if such regulations are set aside, withdrawn or for any reason cease to be applicable to the Company. An Existing Qualifying Renewable Energy Power Production Facility is eligible to the benefits of this Rate REP except as otherwise expressly forbidden by law.

DEFINITIONS:

- (a) Qualifying Renewable Energy Power Production Facility (the "Facility") means an arrangement of equipment for the production of electricity with capacity no less than 50 kW (20 kW for solar) and no greater than 10 MW. The Facility shall be located at one site and is not the aggregation of more than one site each less than 50 kW (20 kW for solar) and which produces electric power through the use of 100% renewable resources or fuel. Such resources or fuels include:
 - a. Solar photovoltaic cells and panels
 - b. Wind
 - c. Dedicated crops grown for energy production
 - d. Organic waste biomass
 - e. Biomass will be consistent with the State's definition in IC 8-1-8.8-10.
- (b) Purchase means the purchase of electric energy or capacity or both from the Facility by the Company and is also inclusive of all environmental attributes.
- (c) Sale means the sale of electric energy or capacity or both by the Facility to the Company and is also inclusive of all environmental attributes.
- (d) Environmental Attributes means Renewable Energy Credits ("REC"), carbon credits, greenhouse gas offsets or any other environmental credit, commodity or classification that may be associated with the production of renewable energy from the Facility.
- (e) Interconnection Costs means the reasonable costs of connection, switching, metering, transmission, distribution, safety provisions, and administrative costs incurred by the Company directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a Facility, to the extent such costs are in excess of the corresponding costs which the Company would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection Costs do not include any costs included in the calculation of Avoided Costs.
- (f) System Emergency means a condition on the Company's system which is liable to result in imminent significant disruption of service to Customers or in substantial deviation from normal service standards or which is imminently liable to endanger life or property.
- (g) Commission means the Indiana Utility Regulatory Commission.
- (h) FERC means Federal Energy Regulatory Commission.

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- (i) Peak Period means the time between 6 a.m. and 10 p.m. (April through September) or between 7 a.m. and 11 p.m. (October through March) on all days except Saturdays and Sundays, which daily time period will be subject to change from time to time at the Company's option. This change would occur after no less than ten (10) days notice has been given to all Customers who would be affected, and to the Commission.
- (j) Off Peak Period means the time not included in the Peak Period.

PURCHASE AND SALE:

Purchases and sales shall also be subject to the following general terms and conditions:

- a. The Company shall not be obligated to purchase or sell at a time of System Emergency.
- b. The Customer shall sell the total production of the Facility to the Company.
- c. The Customer shall receive service for their load at the appropriate retail rate from the Company. The applicable rate is not impacted by the Customer's participation in Rate REP.
- d. The Company may limit total participation under this Rate REP to 1% of the Company's retail electric kWh sales from the prior calendar year.

INTERCONNECTION CONDITIONS AND COSTS:

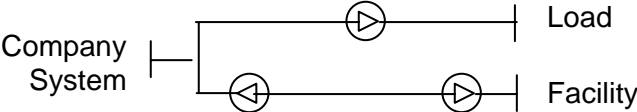
- (a) The Company, subject to prior compliance by the Facility with all applicable Federal and State laws and regulations, shall make parallel interconnection with the Facility in such a way as to accomplish purchases and sales as described in Sections (b) through (f).
- (b) The Facility shall comply with the National Electrical Safety Code, as supplemented, the applicable requirements of 170 IAC 4-4.3, and the Company's rules and regulations for electric service.
- (c) Interconnection Costs from the Facility to the Company's distribution or transmission system, including those costs of (d) and (e) below, shall be borne by the Facility. There shall be no obligation on the Company to finance such interconnection.
- (d) The Facility shall install, operate, and maintain in good order such relays, locks and seals, breakers, automatic synchronizer, and other control and protective apparatus as shall be designated by the Company for operation parallel to its system. The Facility shall bear full responsibility for the installation and safe operation of this equipment.
- (e) Breakers capable of isolating the Facility from the Company shall at all times be immediately accessible to the Company. The Company may isolate the Facility at its own discretion if the Company believes continued parallel operation with the Facility creates or contributes to a System Emergency. System Emergencies causing discontinuance of parallel operation are subject to verification by the Commission.
- (f) To properly record numbers of kilowatthours for, respectively, purchase and sale, the following configurations shall be the basis for metering.
 - (1) Where such measurement is appropriate for measurement of energy, the circuit shall include at minimum one monodirectional meter between, at one side, the Company system and, on the other side, the load and a bidirectional meter between, at one side, the Company system and on the other side, the Facility and any load associated with it

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- (2) Where such measurement is appropriate for measurement of energy, the circuit shall include a monodirectional meter between the on-site load and the Company and, in a series arrangement, two monodirectional meters between the Facility and the Company system:



- (3) The meter measuring purchases by the Company shall be of a design to record time periods, and shall be capable of electronically transmitting instantaneous readings.
- (4) Other metering arrangements shall be the subject of negotiations between the Company and the Customer.

RATE REP PURCHASE RATES:

The rate the Company will pay each Customer for energy and capacity purchased from their Facility will be established in advance by written contract with the Company as filed and approved by the Commission and will be based on the RATE REP PURCHASE RATES. the RATE REP PURCHASE RATES may be adjusted by the Company as circumstances warrant through the IURC's 30-day administrative filing process. Unless otherwise agreed, the RATE REP PURCHASE RATES shall be:

- (a) Solar
 - a. Capacity None
 - b. Energy
 - (a) For Facilities generating 20 kW to 100 kW: 24.0¢ per KWH
 - (b) For Facilities generating more than 100 kW: 20.0¢ per KWH
- (b) Wind
 - a. Capacity None
 - b. Energy
 - (a) For Facilities generating 50 kW to 100 kW: 14.0¢ per KWH
 - (b) For Facilities generating 100 kW to 1 MW: 10.5¢ per KWH
 - (c) For Facilities generating more than 1 MW: 7.5¢ per KWH
- (c) Biomass
 - a. Capacity \$6.18 per KW per month
 - b. Energy 8.5¢ per KWH

The Company and the Customer may negotiate terms and a rate for energy or capacity which differs from the filed rates by the Company. The length of any contract shall not exceed ten (10) years. The Company and the Customer may agree to increase or decrease the rate in recognition of the following factors:

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Indianapolis, Indiana

I.U.R.C. No. E-16

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- (1) The extent to which scheduled outages of the Facility can be usefully coordinated with scheduled outages of the Company's generation facilities;
- (2) The relationship of the availability of energy from the Facility to the ability of the Company to avoid costs, particularly as is evidenced by the Company's ability to dispatch the Facility;
- (3) The usefulness of the Facility during System Emergencies, including the ability of the Facility to separate its load from its generation;
- (4) The impact of tax credits, grants and other financial incentives that when combined with the rate would produce excessive profits for the Facility.
- (5) Rates and adjustments prescribed in the contract shall remain in effect notwithstanding changes made to the RATE REP PURCHASE RATES from time to time.

RATES FOR SALE BY COMPANY:

Back-up Power shall be provided under Standard Contract Rider No. 10. Maintenance Power shall be provided under Standard Contract Rider No. 11. Supplementary Power shall be provided under Standard Contract Rider No. 12. A Customer may not simultaneously qualify for Rate REP, Rate CGS Cogeneration and Small Power Production, Standard Contract Rider No.9, Net Metering, and Standard Contract Rider No. 8 for off-peak service.

STANDARD CONTRACT RIDERS APPLICABLE:

No.1	see Page 150
No. 10	see Page 162
No. 11	see Page 163
No. 12	see Page 164

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CAUSE NO. 43623

VERIFIED SUPPLEMENTAL TESTIMONY

OF

JAMES L. CUTSHAW

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

SPONSORING PETITIONER'S EXHIBITS JLC-2 (REVISED), JLC-4 (REVISED)
AND JLC-5 (REVISED)

**VERIFIED SUPPLEMENTAL TESTIMONY OF
JAMES L. CUTSHAW, REVENUE REQUIREMENTS MANAGER
ON BEHALF OF INDIANAPOLIS POWER & LIGHT COMPANY
CAUSE NO. 43623**

Q1. Please state your name, employer and business address.

A1. My name is James L. Cutshaw. I am employed by Indianapolis Power & Light Company (“IPL” or “Company”), One Monument Circle, Indianapolis, Indiana, 46204.

Q2. Are you the same James L. Cutshaw who prefiled Direct Testimony in this Cause on February 2, 2009?

A2. Yes.

Q3. What is the purpose of your supplemental testimony in this proceeding?

A3. The main purpose of my supplemental testimony is to provide updated Phase I cost recovery schedules which reflect the removal of the costs for the Advanced Metering Infrastructure (“AMI”) from Phase I of this Cause as discussed by Witness Flora. In addition, I will clarify IPL’s expectations concerning the timing of the implementation of Core and Advanced Demand-Side Management Adjustment Tariff (“Rider 22”) if the Commission issues an order in Phase I of this proceeding after June 30, 2009.

Q4. What exhibits are you sponsoring with this supplemental filing?

A4. I am sponsoring the following exhibits:

1. Petitioner’s Exhibit JLC-2 (Revised)
 - IPL’s new Core and Advanced Demand-Side Management Adjustment Tariff

2. Petitioner's Exhibit JLC-4 (Revised)
 - Determination of Impact of Core and Advanced DSM Adjustment for Years 1, 2, and 3
3. Petitioner's Exhibit JLC-5 (Revised)
 - Determination of Core and Advanced DSM Adjustment for the initial CA-DSM Tariff effective for the six-month period beginning July 2009

Q5. Please describe the changes that were made to the Phase I cost recovery schedules.

A5. The format and structure of the revised exhibits are exactly the same as the referenced exhibits attached to my pre-filed direct testimony which they replace. The major change is the removal of all of the AMI costs, which IPL is now requesting to be considered in Phase II of this proceeding. This change is evident by looking at lines 27 through 30 of Petitioner's Exhibits JLC-4 (Revised) and JLC-5 (Revised). In addition, the projected lost revenues / margin related to the AMI measures was removed. This change is reflected on line 32 of the exhibits, but only affects the Year 2 and Year 3 totals since no kW and kWh savings for AMI had been projected in Year 1. The impact of the removal of these costs is a reduction of the proposed CA-DSM Adjustment Factor (Mills per kWh) Adjusted for Utility Receipts Tax as shown on lines 36 and 37 of the exhibit. The changes to the proposed CA-DSM Adjustment Factor (Mills per kWh) Adjusted for Utility Receipts Tax for the six-month period beginning July 2009 were then reflected on the Petitioner's Exhibit JLC-2 (Revised), the proposed Standard Contract Rider 22 ("Rider 22") tariff sheet for the initial period.

Q6. Were the exhibits modified to reflect the deferral of the HAN POC and TOU study costs?

A6. No. Since these costs were proposed to be recovered in a future period, these costs were not explicitly shown in the original or revised schedules. The recovery of up to \$500,000

will be included in future DSM factors reflecting costs authorized in Phase II.

Q7. Did any of the Core DSM costs or Estimated Sales (MWh) shown on these exhibits change from the exhibits filed with your direct testimony?

A7. No.

Q8. What are IPL's expectations concerning the timing of the implementation of the initial Rider 22 tariff sheet if the Commission issues an order in Phase I of this proceeding after June 30, 2009?


A8. IPL still proposes to prepare semi-annual filings to recover the forecasted costs of the Company's proposed DSM program with semi-annual billing periods of July to December and January to June. If the Commission issues an order in Phase I of this proceeding after June 30, 2009, IPL anticipates that the initial Rider 22 would become effective with the first billing cycles at the start of the billing month after the order, and would continue in effect through December 2009 as initially proposed. IPL would submit a filing in October 2009 to be effective for the billing period of January 2010 through June 2010 also as initially proposed in order to stay on the same timeline.

Q9. Does this conclude your supplemental testimony?

A9. Yes.

VERIFICATION

I, James L. Cutshaw, Revenue Requirements Manager of Indianapolis Power & Light Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.



James L. Cutshaw

Dated: May 1, 2009

Indianapolis Power & Light Company
One Monument Circle
Indianapolis, Indiana

I.U.R.C. No. E-16

Original No.

STANDARD CONTRACT RIDER NO. 22
CORE AND ADVANCED DEMAND-SIDE MANAGEMENT ADJUSTMENT
(Applicable to Rates RS, UW, CW, SS, SH, OES, SL, PL, PH and HL)

In addition to the rates and charges set forth in the above mentioned Rates, a Core and Advanced Demand-Side Management (CA-DSM) Adjustment applicable for approximately six (6) months or until superseded by a subsequent factor shall be made in accordance with the following provisions:

A. The CA-DSM adjustment per KWH shall be calculated by multiplying the KWH billed by an Adjustment Factor established according to the following formula:

$$CA-DSM = \frac{P + LR}{S} \quad (\text{For each rate class})$$

where:

1. "P" is the estimate of Core and Advanced DSM program costs, including incentives, incurred in the six-month period beginning with the month of July 2009 to implement the programs approved in Cause No. 43623.
 2. "LR" is the estimate of lost revenue for the six-month period beginning with the month of July 2009 and calculated as follows:
 - (a) The participants for each program eligible for lost revenue recovery estimated for each of the six months; times
 - (b) The reduction in energy and demand for each program to obtain the total reduction in energy and demand for all CA-DSM programs summed by rate. This total times
 - (c) The lost contribution to fixed costs for each rate, that is, the average marginal price by rate less the base cost of fuel and/or the demand rate, to obtain the lost revenue by rate summed by rate class.
 3. "S" is the estimated kilowatt-hour sales for the six-month period beginning with the month of July 2009 consisting of the net sum in kilowatt-hours of:
 - (a) Net generation,
 - (b) Purchases and
 - (c) Interchange-in, less
 - (d) Inter-system Sales,
 - (e) Energy Losses and Company Use
- B. The CA-DSM Adjustment Factor as computed above for each rate class shall be further modified to allow the recovery of utility receipts taxes and other similar revenue-based tax charges occasioned by the CA-DSM adjustment revenues.
- C. The CA-DSM Adjustment Factor may be further modified to reflect the difference between the actual and estimated program costs and Customer participation levels.

Indianapolis Power & Light Company
One Monument Circle
Indianapolis, Indiana

I.U.R.C. No. E-16

Original No.

STANDARD CONTRACT RIDER NO. 22 (Continued)

D. The CA-DSM Adjustment Factor to be effective for all bills rendered for electric service beginning with the first billing cycles for _____ 2009 (Regular Billing District 41 and Special Billing Route 01) will be:

\$0.000796 per KWH for Rates RS, CW (with associated Rate RS service)

\$0.000433 per KWH for Rates SS, SH, OES, UW, CW (with associated Rate SS service)

\$0.000144 per KWH for Rate SL

\$0.000000 per KWH for Rates PL, PH, HL

Indianapolis Power & Light Company
Determination of Impact of
Core and Advanced DSM Adjustment
(000\$) and (000MWh)

Line

			Year 2 Totals				
		Target	RS, CW	SS, SH, OES UW, CW	SL	PL, PH, HL	
Projected	Performance	Total	Residential	Small C&I	Large C&I	Large C&I	
Expenditure	Incentive						
1	Core DSM Programs						
2	<u>Residential DSM Programs</u>						
3	Air Conditioning Load Management (ACLM) Program	\$2,634	\$527	\$3,161	\$3,161		
4	Energy Assessment Program	\$267	\$53	\$320	\$320		
5	On-Site Audit with Direct Install Program	\$1,397	\$279	\$1,676	\$1,676		
6	Prescriptive Lighting Program	\$220	\$44	\$264	\$264		
7	New Construction Energy Star Plus Program	\$83	\$17	\$100	\$100		
8	Second Refrigerator Pickup and Recycling Program	\$247	\$49	\$296	\$296		
9	Subtotal Residential 1	\$4,848	\$969	\$5,817	\$5,817		
10	Renewables Incentive Program	\$75	\$11	\$86	\$86		
11	Low and Moderate Income Weatherization Program	\$630	\$95	\$725	\$725		
12	Energy Efficiency Education & Indirect Costs	\$388	\$39	\$427	\$427		
13	Subtotal Residential 2	\$1,093	\$145	\$1,238	\$1,238		
14	Total Residential	\$5,941	\$1,114	\$7,055	\$7,055		
15	<u>Commercial & Industrial DSM Programs</u>						
16	Air Conditioning Load Management (ACLM) Program	\$199	\$40	\$239	\$239	\$0	
17	Custom Program	\$262	\$52	\$314	\$172	\$142	
18	Prescriptive Program	\$1,273	\$255	\$1,528	\$839	\$689	
19	Retro-Commissioning Pilot Program	\$165	\$33	\$198	\$0	\$198	
20	New Construction Program	\$156	\$31	\$187	\$103	\$84	
21	Subtotal Commercial 1	\$2,055	\$411	\$2,466	\$1,353	\$1,113	
22	Renewables Incentive Program	\$25	\$4	\$29	\$16	\$13	
23	Energy Efficiency Education & Indirect Costs	\$113	\$11	\$124	\$68	\$56	
24	Subtotal Commercial 2	\$138	\$15	\$153	\$84	\$69	
25	Total Commercial	\$2,193	\$426	\$2,619	\$1,437	\$1,182	
26	Total Core DSM Programs	\$8,134	\$1,540	\$9,674	\$7,055	\$1,437	\$1,182
27	Advanced DSM Programs - Phase 1						
28	AMI Communications System Upgrade	\$0	\$0	\$0	\$0	\$0	\$0
29	AMI Meters Upgrade - Demand-billed Customers	\$0	\$0	\$0		\$0	\$0
30	Total Advanced DSM Programs - Phase 1	\$0	\$0	\$0	\$0	\$0	\$0
31	Total Program Costs (000\$)	\$8,134	\$1,540	\$9,674	\$7,055	\$1,437	\$1,182
32	Projected Lost Revenues / Margin			\$1,078	\$450	\$391	\$237
33	Grand Total Costs to be Recovered			\$10,752	\$7,505	\$1,828	\$1,419
34	/ Estimated Sales (MWh)			15,314.6	5,347.7	2,032.3	3,884.4
35	CA-DSM Adjustment Factor (Mills per kWh)				1.403	0.899	0.365
36	CA-DSM Adjustment Factor (Mills per kWh)				1.425	0.913	0.371
37	Adjusted for Utility Receipts Tax						0.000

Indianapolis Power & Light Company
Determination of Impact of
Core and Advanced DSM Adjustment
(000\$) and (000MWh)

Line

				Year 3 Totals				
Projected Expenditure		Target Performance Incentive	Total	RS, CW Residential	SS, SH, OES UW, CW Small C&I	SL Large C&I	PL, PH, HL Large C&I	
1	Core DSM Programs							
2	<u>Residential DSM Programs</u>							
3	Air Conditioning Load Management (ACLM) Program	\$4,973	\$995	\$5,968	\$5,968			
4	Energy Assessment Program	\$388	\$78	\$466	\$466			
5	On-Site Audit with Direct Install Program	\$1,747	\$349	\$2,096	\$2,096			
6	Prescriptive Lighting Program	\$254	\$51	\$305	\$305			
7	New Construction Energy Star Plus Program	\$114	\$23	\$137	\$137			
8	Second Refrigerator Pickup and Recycling Program	\$364	\$73	\$437	\$437			
9	Subtotal Residential 1	\$7,840	\$1,569	\$9,409	\$9,409			
10	Renewables Incentive Program	\$75	\$11	\$86	\$86			
11	Low and Moderate Income Weatherization Program	\$930	\$140	\$1,070	\$1,070			
12	Energy Efficiency Education & Indirect Costs	\$388	\$39	\$427	\$427			
13	Subtotal Residential 2	\$1,393	\$190	\$1,583	\$1,583			
14	Total Residential	\$9,233	\$1,759	\$10,992	\$10,992			
15	<u>Commercial & Industrial DSM Programs</u>							
16	Air Conditioning Load Management (ACLM) Program	\$320	\$64	\$384		\$384	\$0	
17	Custom Program	\$423	\$85	\$508		\$279	\$229	
18	Prescriptive Program	\$1,404	\$281	\$1,685		\$925	\$760	
19	Retro-Commissioning Pilot Program	\$236	\$47	\$283		\$0	\$283	
20	New Construction Program	\$173	\$35	\$208		\$114	\$94	
21	Subtotal Commercial 1	\$2,556	\$512	\$3,068		\$1,702	\$1,366	
22	Renewables Incentive Program	\$25	\$4	\$29		\$16	\$13	
23	Energy Efficiency Education & Indirect Costs	\$113	\$11	\$124		\$68	\$56	
24	Subtotal Commercial 2	\$138	\$15	\$153		\$84	\$69	
25	Total Commercial	\$2,694	\$527	\$3,221		\$1,786	\$1,435	
26	Total Core DSM Programs	\$11,927	\$2,286	\$14,213	\$10,992	\$1,786	\$1,435	\$0
27	Advanced DSM Programs - Phase 1							
28	AMI Communications System Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	
29	AMI Meters Upgrade - Demand-billed Customers	\$0	\$0	\$0		\$0	\$0	
30	Total Advanced DSM Programs - Phase 1	\$0	\$0	\$0	\$0	\$0	\$0	
31	Total Program Costs (000\$)	\$11,927	\$2,286	\$14,213	\$10,992	\$1,786	\$1,435	\$0
32	Projected Lost Revenues / Margin			\$1,901	\$827	\$660	\$414	\$0
33	Grand Total Costs to be Recovered			\$16,114	\$11,819	\$2,446	\$1,849	\$0
34	/ Estimated Sales (MWh)			15,540.3	5,431.4	2,062.5	3,984.5	4,061.8
35	CA-DSM Adjustment Factor (Mills per kWh)				2.176	1.186	0.464	0.000
36	CA-DSM Adjustment Factor (Mills per kWh)				2.210	1.204	0.471	0.000
37	Adjusted for Utility Receipts Tax							

Indianapolis Power & Light Company
 Determination of Impact of
 Core and Advanced DSM Adjustment
 (000\$) and (000MWh)

		July 2009 to December 2009						
		Projected Expenditure	Target Performance Incentive	Total	RS, CW Residential	SS, SH, OES UW, CW Small C&I	SL Large C&I	PL, PH, HL Large C&I
1	Core DSM Programs							
2	<u>Residential DSM Programs</u>							
3	Air Conditioning Load Management (ACLM) Program	\$756	\$151	\$907	\$907			
4	Energy Assessment Program	\$66	\$13	\$79	\$79			
5	On-Site Audit with Direct Install Program	\$244	\$49	\$293	\$293			
6	Prescriptive Lighting Program	\$68	\$14	\$82	\$82			
7	New Construction Energy Star Plus Program	\$16	\$3	\$19	\$19			
8	Second Refrigerator Pickup and Recycling Program	\$0	\$0	\$0	\$0			
9	Subtotal Residential 1	\$1,150	\$230	\$1,380	\$1,380			
10	Renewables Incentive Program	\$28	\$4	\$32	\$32			
11	Low and Moderate Income Weatherization Program	\$240	\$36	\$276	\$276			
12	Energy Efficiency Education & Indirect Costs	\$240	\$24	\$264	\$264			
13	Subtotal Residential 2	\$508	\$64	\$572	\$572			
14	Total Residential	\$1,658	\$294	\$1,952	\$1,952			
15	<u>Commercial & Industrial DSM Programs</u>							
16	Air Conditioning Load Management (ACLM) Program	\$52	\$10	\$62		\$62	\$0	
17	Custom Program	\$46	\$9	\$55		\$30	\$25	
18	Prescriptive Program	\$290	\$58	\$348		\$191	\$157	
19	Retro-Commissioning Pilot Program	\$0	\$0	\$0		\$0	\$0	
20	New Construction Program	\$52	\$10	\$62		\$34	\$28	
21	Subtotal Commercial 1	\$440	\$87	\$527		\$317	\$210	
22	Renewables Incentive Program	\$0	\$0	\$0		\$0	\$0	
23	Energy Efficiency Education & Indirect Costs	\$60	\$6	\$66		\$36	\$30	
24	Subtotal Commercial 2	\$60	\$6	\$66		\$36	\$30	
25	Total Commercial	\$500	\$93	\$593		\$353	\$240	
26	Total Core DSM Programs	\$2,158	\$387	\$2,545	\$1,952	\$353	\$240	\$0
27	Advanced DSM Programs - Phase 1							
28	AMI Communications System Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	AMI Meters Upgrade - Demand-billed Customers	\$0	\$0	\$0			\$0	\$0
30	Total Advanced DSM Programs - Phase 1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31	Total Program Costs (000\$)	\$2,158	\$387	\$2,545	\$1,952	\$353	\$240	\$0
32	Projected Lost Revenues / Margin			\$245	\$126	\$83	\$36	\$0
33	Grand Total Costs to be Recovered			\$2,790	\$2,078	\$436	\$276	\$0
34	/ Estimated Sales (MWh)			7,666.7	2,651.7	1,023.8	1,941.2	2,050.1
35	CA-DSM Adjustment Factor (Mills per kWh)				0.784	0.426	0.142	0.000
36	CA-DSM Adjustment Factor (Mills per kWh)				0.796	0.433	0.144	0.000
37	Adjusted for Utility Receipts Tax							

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS)
POWER & LIGHT COMPANY REQUESTING)
THE INDIANA UTILITY REGULATORY)
COMMISSION TO APPROVE AN)
ALTERNATIVE REGULATORY PLAN)
PURSUANT TO IND. CODE § 8-1-2.5-1, *ET SEQ.*,)
FOR THE OFFERING OF ENERGY)
EFFICIENCY CONSERVATION, DEMAND)
RESPONSE AND DEMAND-SIDE)
MANAGEMENT PROGRAMS AND)
ASSOCIATED RATE TREATMENT)
INCLUDING INCENTIVES IN ACCORDANCE)
WITH IND. CODE §§ 8-1-2.5-1 *ET SEQ.* AND 8-1-)
2-42(a); AUTHORITY TO DEFER PROGRAM)
COSTS ASSOCIATED WITH ITS ENERGY)
EFFICIENCY PORTFOLIO PROGRAMS;)
AUTHORITY TO IMPLEMENT NEW AND)
ENHANCED ENERGY PROGRAMS AND)
APPROVAL OF MODIFICATION OF THE)
FUEL ADJUSTMENT CLAUSE EARNINGS)
AND EXPENSE TESTS.)

CAUSE NO. 43623

VERIFIED SUPPLEMENTAL TESTIMONY

OF

JOAN M. SOLLER

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

VERIFIED SUPPLEMENTAL TESTIMONY OF
JOAN M. SOLLER, SENIOR REGULATORY ANALYST
ON BEHALF OF INDIANAPOLIS POWER & LIGHT COMPANY
CAUSE NO. 43623

1 **Q1. Please state your name, employer and business address.**

2 A1. My name is Joan M. Soller. I am employed by Indianapolis Power & Light Company
3 (“IPL” or “Company”), One Monument Circle, Indianapolis, Indiana, 46204.

4 **Q2. What is your position with IPL?**

5 A2. I am Senior Regulatory Analyst.

6 **Q3. Please describe your duties as Senior Regulatory Analyst.**

7 A3. As Senior Regulatory Analyst I provide financial, technical and regulatory analysis
8 supporting senior management, and assimilate technical and economic information into
9 rate design.

10 **Q4. Please briefly describe your educational and business experience.**

11 A4. I received a Bachelors Degree in Electric Engineering from the University of Dayton in
12 1987. I am a licensed professional engineer in the State of Indiana. I was employed by
13 Dayton Power & Light Company (“DP&L”) in Dayton, Ohio from 1984-1987 as a co-op
14 student. I was employed by Ohio Edison Company in Mansfield, Ohio, from 1987-1989
15 as a Distribution Engineer. I returned to DP&L in 1989 as a Distribution Engineer of
16 System Planning to complete distribution planning, as well as develop and teach
17 distribution engineering training in conjunction with Sinclair Community College
18 through 1995.

1 I was employed by Hendricks Power Cooperative in Danville, Indiana, from 2000-2005,
2 as Distribution Engineer and Manager of Engineering. My responsibilities there included
3 distribution planning, reliability coordination, long-term work plan creation, Geographic
4 Information System (GIS) mapping, capital project management and customer policy
5 advisement. I joined the Indiana Office of Utility Consumer Counselor staff as the
6 Director of the Electric Division in January 2006 and was named Director of Resource
7 Planning, Emerging Technologies and Telecommunications in May 2008. I have been a
8 member of the Institute of Electrical and Electronics Engineers (IEEE) since 1985. I
9 joined IPL in my current position in January 2009.

10 **Q5. Have you previously testified before the Commission?**

11 A5. Yes.

12 **Q6. Are you familiar with IPL's Petition in this proceeding and the relief that it seeks?**

13 A6. Yes, I am.

14 **Q7. Have you reviewed the testimony and exhibits of the other witnesses in this Cause?**

15 A7. Yes.

16 **Q8. What is the purpose of your supplemental testimony in this proceeding?**

17 A8. The purpose of my testimony is to describe the results of IPL's Advanced Metering
18 Infrastructure Proof of Concept ("AMI POC") conducted with Landis + Gyr ("L+G") and
19 describe research related to technologies that can enable energy efficiency and demand
20 response or "Advanced DSM" functions. Based on these findings and the federal
21 stimulus announcements described by Witness Flora, I describe a modified course of
22 action for IPL to leverage its existing Automated Meter Reading ("AMR") equipment for

1 the proposed Home Area Network (“HAN”) POC while continuing to develop an AMI
2 solution.

3 **Q9. Please describe the results of the AMI POC described in Witness Bentley's Direct**
4 **Testimony filed in this Cause.**

5 A9. The AMI POC achieved the transmittal of interval metering data including real power
6 (kW) and reactive power (kVAR) related to five specific demand metered customers as
7 well as energy consumption (kWh) for two energy-only metered customers. Specific
8 elements including hardware, software, and meter firmware were successfully integrated.
9 Data gaps occurred due to software and hardware malfunctions, which were not detected
10 over weekend periods, when the server was not monitored by L+G personnel. Integration
11 into IPL's data translation system, “MV 90”, was effective for the demand meters
12 following software modifications. Comparative analysis of existing billing meter data
13 and test meter data in MV 90 indicated the transmittal of meaningful and accurate kW
14 and kVAR information; however the actual communication success rate fell short of the
15 L+G goal of 100%. The AMI POC also tested the capabilities of the MV 90 system to
16 view the data from the two energy only meters. IPL typically only uses the MV 90
17 system for data translation on demand metered accounts. Software compatibility issues
18 prohibited the data translation process to energy only meters. The processes tested were
19 only partially successful and resulted in the need for extended testing.

20 **Q10. What is L+G's proposal for extended testing?**

21 A10. L+G has replaced some test system components and plans to repeat the testing steps over
22 a 45-day period. Specifically, L+G has replaced its data collector hardware and upgraded
23 its server software for the extended testing environment. The server will be monitored on

1 a 24x7 basis so local personnel can be notified if system components do not perform as
2 expected. L+G has also upgraded meter firmware and will verify its compatibility with
3 software and the MV 90 translation process prior to the start of a timed test. Thirty (30)
4 days of interval usage data will be collected from late April to late May and sent to IPL
5 for evaluation.

6 **Q11. What has IPL learned about the availability of “near real-time” data for**
7 **commercial and industrial customers?**

8 A11. Several AMI vendors directed IPL to consider a separate software system to manage the
9 presentation of energy usage data to end-use customers. Since the data requirements and
10 physical challenges related to the distance between commercial and industrial (“C&I”)
11 customers meters and potential devices are unique, IPL staff contacted several vendors to
12 discuss solutions that meet C&I needs. IPL is in the process of evaluating the technical
13 system requirements, typical interval reading success rates and cost estimates to
14 implement possible solutions based upon input from several vendors. Research indicates
15 that many utilities provide C&I customers data through internet portals and
16 authentication processes on a one-day delay to allow time for data verification. A small
17 portion of C&I customers have installed equipment and energy management systems to
18 receive pulses directly from electric meters, which is consistent with IPL’s experience of
19 working with about one-hundred (100) customers to install this near-real time access
20 functionality.

21 **Q12. What other research did IPL accomplish?**

22 A12. IPL investigated several other AMI solutions through discussions with vendors and staff
23 from utilities around the country. Responses to Requests for Information (“RFIs”) and

1 technical discussions have provided information about other viable alternatives to deploy
2 AMI for C&I customers as well as residential HANs.

3 **Q13. What have you learned about AMI alternatives?**

4 A13. Many utilities are in the process of deploying AMI systems with similar technological
5 components. IPL has received responses to its RFI from several vendors and is
6 discussing possible solutions with those that appear to have a viable alternative to the
7 L+G solution. Because many of the tasks associated with a possible AMI deployment
8 relate to integrating vendor specific systems with IPL's data translation and customer
9 billing systems, discussions about technical requirements have occurred. In addition, IPL
10 staff had discussions with Indiana Michigan Power Company staff who is deploying a
11 Smart Metering Pilot Program in South Bend, Indiana, and we plan to visit the pilot site
12 in May.

13 **Q14. What are the next steps IPL will undertake to determine how to move forward with
14 an AMI solution?**

15 A14. IPL plans to continue to investigate AMI options and assess the results of the extended
16 testing in order to select an AMI vendor and solution by July 2009. This timing will
17 allow IPL to develop a project plan which we plan to submit to the Department of Energy
18 ("DOE") for consideration to receive a smart grid investment grant. The anticipated
19 application deadline is July 29, 2009. This application deadline factored into IPL's
20 decision to request that consideration of AMI be moved to Phase II of this proceeding.

21 **Q15. Please summarize IPL's findings related to Home Area Networks.**

1 A15. IPL's overall objective is to investigate the potential for additional DSM programs that
2 cost effectively meet the electricity service needs of our customers. While many AMI
3 vendors employ similar techniques to collect meter data, experience with advanced DSM
4 functions vary. In addition, HAN technology is dynamic with several vendors and
5 utilities considering new combinations of technologic solutions. Since IPL filed its case-
6 in-chief, IPL has learned that HAN equipment that intercepts an AMR signal and
7 converts it to a Zigbee signal which is compatible with in-home devices, is currently
8 undergoing a limited test in the Midwest. IPL believes there is merit in pursuing such
9 testing in our service area to determine the viability of leveraging existing energy only
10 AMR meter assets to begin collecting information about customer responsiveness to time
11 of use ("TOU") rates. In addition, IPL will also be testing the viability of this AMR
12 HAN technology for purposes of collecting the billing data necessary for implementing
13 TOU rates.

14 **Q16. In light of industry developments related to HAN equipment and the potential for**
15 **stimulus funding, does IPL plan to change its short-term plan for the proposed**
16 **HAN POC?**

17 A16. Yes. IPL proposes to test HAN equipment that will work with the existing AMR system
18 and possibly test HAN equipment that will work with an AMI system. IPL is in the
19 process of investigating specific options with several vendors and plans to limit the
20 recovery of costs associated with HAN testing to the originally estimated cost of
21 \$300,000.

22 **Q17. When does IPL intend to complete its proposed time-of-use study?**

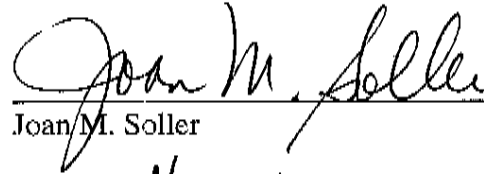
1 A17. IPL still intends to complete the time-of-use (“TOU”) study during the second half of
2 2009 in order to propose a TOU rate that could be tested with HAN participants. The
3 estimated cost of this study is \$100,000. IPL has determined that modifications to its
4 customer accounting system required to accommodate time-based rates will likely span
5 many months. The estimated costs for the implementation and evaluation of time-based
6 rates are an additional \$100,000, which IPL is requesting to defer for future recovery as
7 discussed in the supplemental testimony of Witness Flora.

8 **Q18. Does this conclude your supplemental testimony?**

9 A18. Yes, at this time.

VERIFICATION

I, Joan M. Soller, Senior Regulatory Analyst of Indianapolis Power & Light Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.



Joan M. Soller

Joan M. Soller

Dated: May 1, 2009