FILED July 28, 2015 INDIANA UTILITY **REGULATORY COMMISSION** STATE OF INDIANA INDIANA UTILITY REGULATORY COMMISSION PETITION OF INDIANAPOLIS POWER & LIGHT COMPANY ("IPL") FOR AUTHORITY TO INCREASE RATES AND CHARGES FOR CAUSE NO. 44576 **ELECTRIC UTILITY SERVICE AND FOR APPROVAL OF: (1)** ACCOUNTING RELIEF, INCLUDING IMPLEMENTATION OF MAJOR **STORM DAMAGE RESTORATION RESERVE ACCOUNT; (2) REVISED DEPRECIATION RATES; (3) THE INCLUSION IN BASIC** RATES AND CHARGES OF THE COSTS OF CERTAIN PREVIOUSLY APPROVED QUALIFIED POLLUTION CONTROL **PROPERTY; (4) IMPLEMENTATION OF NEW OR MODIFIED RATE** ADJUSTMENT MECHANISMS TO TIMELY RECOGNIZE FOR **RATEMAKING PURPOSES LOST REVENUES FROM DEMAND-**SIDE MANAGEMENT PROGRAMS AND CHANGES IN (A)CAPACITY PURCHASE COSTS; (B) REGIONAL TRANSMISSION ORGANIZATION COSTS; AND (C) OFF SYSTEM SALES MARGINS; AND (5) NEW SCHEDULES OF RATES, RULES AND **REGULATIONS FOR SERVICE.** CAUSE No. IN THE MATTER OF THE INDIANA UTILITY REGULATORY 44602 **COMMISSION'S INVESTIGATION INTO INDIANAPOLIS POWER &** LIGHT COMPANY'S ONGOING INVESTMENT IN, AND OPERATION AND MAINTENANCE OF, ITS NETWORK FACILITIES. Direct Testimony and Exhibits of **IURC** Nicholas Phillips, Jr. **INTERVENOR'S** EXHIBIT NO. On behalf of DATE REPORTE **IPL Industrial Group** July 27, 2015 BRUBAKER & ASSOCIATES, INC. Project 10009 008583

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANAPOLIS POWER & LIGHT COMPANY ("IPL") FOR AUTHORITY TO INCREASE RATES AND CHARGES FOR ELECTRIC UTILITY SERVICE AND FOR APPROVAL OF: (1) ACCOUNTING RELIEF, INCLUDING IMPLEMENTATION OF MAJOR **STORM DAMAGE RESTORATION RESERVE ACCOUNT; (2) REVISED DEPRECIATION RATES; (3) THE INCLUSION IN BASIC RATES AND CHARGES OF THE COSTS OF CERTAIN** PREVIOUSLY APPROVED QUALIFIED POLLUTION CONTROL **PROPERTY: (4) IMPLEMENTATION OF NEW OR MODIFIED RATE** ADJUSTMENT MECHANISMS TO TIMELY RECOGNIZE FOR **RATEMAKING PURPOSES LOST REVENUES FROM DEMAND-**SIDE MANAGEMENT PROGRAMS AND CHANGES IN (A)CAPACITY PURCHASE COSTS: (B) REGIONAL TRANSMISSION ORGANIZATION COSTS; AND (C) OFF SYSTEM SALES MARGINS; AND (5) NEW SCHEDULES OF RATES, RULES AND **REGULATIONS FOR SERVICE.**

IN THE MATTER OF THE INDIANA UTILITY REGULATORY COMMISSION'S INVESTIGATION INTO INDIANAPOLIS POWER & LIGHT COMPANY'S ONGOING INVESTMENT IN, AND OPERATION AND MAINTENANCE OF, ITS NETWORK FACILITIES. CAUSE NO. 44576

CAUSE No. 44602

Direct Testimony of Nicholas Phillips, Jr.

- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

4 Q WHAT IS YOUR OCCUPATION?

5 A I am a consultant in the field of public utility regulation and Managing Principal of 6 Brubaker & Associates, Inc., energy, economic and regulatory consultants. Our firm 7 and its predecessor firms have been in this field since 1937 and have participated in 8 more than 1,000 proceedings in forty states and in various provinces in Canada. We have experience with more than 350 utilities including many electric utilities, gas
pipelines and local distribution companies ("LDCs"). I have testified in many electric
and gas rate proceedings on virtually all aspects of ratemaking. More details are
provided in Appendix A attached to this testimony.

5 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A The IPL Industrial Group ("Industrial Group"). Industrial Group members purchase
substantial quantities of electricity from Indianapolis Power & Light Company ("IPL" or
8 "Company").

9 Q HAVE YOU BEEN INVOLVED WITH PRIOR PROCEEDINGS BEFORE THE 10 INDIANA UTILITY REGULATORY COMMISSION ("IURC" OR "COMMISSION")?

11 A Yes. I have been involved in prior proceedings before this Commission and have 12 presented testimony in many of those proceedings. I presented testimony on behalf 13 of the IPL Industrial Group in IPL's last base rate case, Cause No. 39938, and was 14 involved in Cause No. 42170, which established IPL's Standard Contract Rider 15 No. 20 ("Rider No. 20"). I filed testimony in Cause No. 44242 and Cause No. 44339, 16 recently decided by the Commission. I have either presented testimony or been 17 involved in numerous IPL cases before this Commission over the last 30 years.

18 Q DOES THE FACT THAT YOU DID NOT ADDRESS EVERY ISSUE RAISED IN

19IPL'S TESTIMONY MEAN THAT YOU AGREE WITH IPL'S TESTIMONY ON20THOSE ISSUES?

A No. It merely reflects that I did not choose to address all those issues. It should not
be read as an endorsement of, or agreement with, IPL's position on such issues.

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1 Q WHAT TESTIMONY ARE YOU PRESENTING AT THIS TIME?

A I am presenting testimony concerning the appropriate cost allocation methodology and the proper design of IPL's electric rates. There are certain general principles that should form the basis for cost allocation and rate design. I have examined the testimony and exhibits presented by IPL in this proceeding with respect to cost allocation and rate design, will comment upon the propriety of these proposals, and make certain recommendations. I also examine the policy implications of adding more tracking mechanisms as proposed by IPL.

9 Summary of Position and Recommendations

10 Q WOULD YOU BRIEFLY SUMMARIZE YOUR RECOMMENDATIONS IN THIS

11 **PROCEEDING?**

- 12 A Yes. A summary of my position and recommendations is listed below:
- (1) IPL's total Indiana jurisdictional revenue requirement and allowed increase should
 be allocated to customer classes based on the cost of providing service to the
 various customer classes.
- 16 (2) The coincident peak method of cost allocation continues to be the most appropriate method of allocating IPL's investment in production and transmission facilities. However, the average of the 12 monthly coincident peak demands (12 CP) method is no longer reflective of IPL's current or projected loads.
- (3) While it is recommended that IPL continue to use the coincident peak method of
 cost allocation for the allocation of production and transmission investment, either
 the four summer coincident peak (4 CP) method or the six coincident peak (6 CP)
 method are appropriate for cost allocation. The utilization of either of these
 methods would not cause abrupt changes in rate levels to customer classes but
 would greatly improve the cost of service study to reflect the realities of the IPL
 system, both now and in the future.
- (4) IPL's original proposed mitigation method appropriately limits large rate increase
 impacts to all classes of customers while reducing subsidies by a uniform amount.
 IPL's fifth revision to direct testimony abandons the uniform subsidy reduction
 approach and results in unfair percentage increases to some classes. IPL's
 revised approach is not appropriate and should be rejected.

- (5) IPL is significantly increasing demand charges in its proposed industrial rates. There is a concern involving customer impact within the industrial classes due to this abrupt rate design change. Mitigation of harsh increases to customers is also important in rate design. For this case, I recommend that whatever percentage increase is authorized by the Commission, each industrial rate schedule be implemented by increasing each element of the rate by that percentage, so that each customer on the rate receives the authorized percentage increase for the class.
- 9 (6) IPL inappropriately collects the interruptible credit from only the Rate HL-3 10 customers. The interruptible credit should be a system revenue requirement item 11 since interruptible load benefits the entire system by reducing capacity needs fuel 12 cost, and assists in system operational flexibility.
- 13 (7) A significant portion of customer bills are currently subject to tracking 14 mechanisms. IPL is requesting three additional tracking mechanisms in this case. 15 Tracking mechanisms are not a substitute for a comprehensive review of utility 16 costs and rates, nor a substitute for appropriate rate design. It is recommended 17 that tracking mechanisms be minimized. If significant tracking mechanisms are 18 granted, IPL should be required to file a periodic base rate case to provide for 19 reasonable rates to its customers. To the extent the Commission approves any of 20 IPL's requested tracking mechanisms, the costs associated with those trackers 21 should be allocated and recovered in the same manner as IPL's base rates.
- (8) IPL's apparent proposal with respect to the establishment of lost margin rates for
 the collection of lost margins associated with DSM measures installed during
 2015 should be carefully considered and scrutinized to ensure fairness to
 ratepayers.

26 Cost of Service and Rate Design Principles

27 Q PLEASE EXPLAIN THE BASIS FOR YOUR EVALUATION AND DESIGN OF

28 **RATES.**

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A The ratemaking process has three steps. First, we must determine the utility's total revenue requirement and whether an increase in revenues is necessary. Second, we must determine how any increase in revenues is to be distributed among the various customer classes, based on the cost to serve each class. A determination of how many dollars of revenue should be produced by each class is essential for obtaining the appropriate level of rates. Finally, individual tariffs must be designed to produce 1

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the required amount of revenues for each class of service and to reflect the cost of serving customers within the class.

3 The guiding principle at each step should be cost of service. In the first step 4 - determining revenue requirements - it is universally agreed that the utility is 5 entitled to an increase only to the extent that its actual cost of service has increased. 6 If current rate levels exceed revenue requirement, a rate reduction is required. In 7 short, rate revenues should equal actual cost of service. The same principle should 8 apply in the second two steps. Each customer class should, to the extent practicable, 9 produce revenues equal to the cost of serving that particular class, no more and no 10 less. This may require a rate increase for some classes and a rate decrease for other 11 classes or different increases for each class. The standard tool for determining this is 12 a class cost of service study which determines the cost to serve each class and 13 compares the rates of return from each class of service. Rate levels should be modified so that each class provides approximately the same rate of return. This 14 15 assures a correct match between the rates charged each class and the cost of 16 serving it. Finally, in designing individual tariffs, the goal should also be to relate the 17 rate design to the cost of service so that each customer's rate tracks, to the extent 18 practicable, the utility's cost of providing that service.

19 **Q**

WHEN YOU SAY "COST," TO WHAT TYPE OF COST ARE YOU REFERRING?

A I am referring to the utility's "embedded" or actual accounting costs of rendering
 services; that is, those costs which are used by the IURC in establishing IPL's overall
 revenue requirement.

1 Q WOULD YOU PLEASE COMMENT ON THE BASIC PURPOSE OF A COST OF 2 SERVICE STUDY?

3 А After determining the overall cost of service or revenue requirement, a cost of service 4 study is used to allocate the cost of service among customer classes. A cost of 5 service study compares the cost each customer class imposes on the system to the 6 revenues each class contributes to the total system cost. For example, when a 7 customer class produces the same rate of return as the total system, it is returning to 8 the utility revenues just sufficient to cover the costs incurred in serving it (including a 9 reasonable authorized return on investment). If a class produces a below-average 10 rate of return, it may be concluded that the revenues from that class are insufficient to 11 cover all relevant costs. On the other hand, if a class produces a rate of return above 12 the average, it is paying revenues sufficient to cover the cost attributable to it and, in 13 addition, is paying part of the cost attributable to other classes who produce a 14 below-average rate of return. The class cost of service study is important, because it 15 shows the class revenue requirement (the cost to serve it), as well as the rate of 16 return from each class under current and any proposed rates.

17 Q WOULD YOU PLEASE COMMENT ON THE PROPER FUNDAMENTALS OF A

18 COST OF SERVICE STUDY?

A Yes. Cost of service is a basic and fundamental ingredient to revenue requirement
 and rate design. In all cost of service studies, certain fundamental concepts should
 be recognized. Of primary importance among these concepts is the functionalization
 of costs. Functionalization is the classification and arrangement of costs according to
 major functions, such as production, transmission and distribution.

1 Another vital step in a cost of service study is classification of the nature of 2 these costs as to whether they vary with the quantity of energy consumed, the 3 demand placed upon the system or the number of customers being served. Fixed 4 costs are those costs which tend to remain constant over the short run irrespective of 5 changes in output and are generally considered to be demand-related. Fixed costs 6 include those costs which are a function of the size of the investment in utility 7 facilities, and those costs necessary to keep the facilities "on-line." Variable costs on 8 the other hand are basically those costs which tend to vary with output and are 9 generally considered to be energy-related. Customer-related costs are those which 10 are closely related to the number of customers served, rather than the quantity of 11 energy consumed or the peak demands placed upon the system. An understanding 12 of these concepts is essential to cost of service studies, as well as appropriate rate 13 design.

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WHY IS IT IMPORTANT TO ADHERE TO BASIC COST OF SERVICE PRINCIPLES

15 IN THE RATE DESIGN PROCESS?

A The basic reasons for using cost of service as the primary factor in the rate design
 process are equity, engineering efficiency (cost minimization), conservation and
 stability.

19 Q HOW IS THE EQUITY PRINCIPLE ACHIEVED BY BASING RATES ON COSTS?

20 A When rates are based on cost, each customer (to the extent practical) pays what it 21 costs the utility to serve that customer, no more and no less. If rates are not based 22 on cost of service, then some customers contribute disproportionately to the utility's revenues and subsidize the service provided to other customers. This is inherently
 inequitable.

3 Q HOW DO COST-BASED RATES ACHIEVE THE ENGINEERING EFFICIENCY 4 (COST MINIMIZATION) OBJECTIVE?

5 A Cost minimization is achieved when customers receive the appropriate price signals 6 through the rates they are charged. Rate design is the step that follows the allocation 7 of costs to classes, so it is important that the proper amounts and types of costs be 8 allocated to the customer classes so that they may ultimately be reflected in the rates.

9 When the rates are designed so that the energy costs, demand costs, and 10 customer costs are properly reflected in the energy, demand and customer 11 components of the rate schedules, respectively, customers are provided with the 12 proper incentives to minimize their costs, which will in turn minimize the costs to the 13 utility.

14 Q HOW DO COST-BASED RATES FURTHER THE GOAL OF CONSERVATION?

A Conservation occurs when wasteful or inefficient uses are discouraged or minimized. Only when rates are based on actual cost of service do customers receive a balanced price signal against which to make their consumption decisions. If customer rates are not based on the cost to serve those customers, then customers may be induced to use electricity inefficiently in response to the distorted signals.

20 Q PLEASE DISCUSS THE STABILITY CONSIDERATION.

A When rates are closely tied to costs, the earnings impact on the utility attributable to changes in customer use patterns will be minimized as a result of rates being designed in the first instance to track changes in the level of costs. Thus, cost-based
 rates provide an important enhancement to a utility's earnings stability, reducing its
 need to file expense trackers, propose rate designs which conflict with other cost of
 service principles or file rate cases.

5 From the perspective of the customer, cost-based rates provide a more 6 reliable means of determining future levels of power costs. If rates are based on 7 factors other than the cost to serve, it becomes much more difficult for customers to 8 translate expected utility-wide cost changes (i.e., expected increases in overall 9 revenue requirements) into changes in the rates charged to particular customer 10 classes (and to customers within the class). This situation reduces the attractiveness 11 of expansion, as well as continued operations, because of the lessened ability to 12 plan.

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Recommended Cost of Service

14 Q IN CONNECTION WITH YOUR ANALYSIS, DID YOU HAVE A COST OF SERVICE 15 STUDY AVAILABLE TO YOU?

16 А Yes, I did. I had available to me a 12 coincident peak (12 CP) cost of service study 17 for the 12-month period ended June 30, 2014 that was produced and furnished by 18 IPL. Using IPL data and cost of service model, I developed two alternate cost of 19 service studies using both the six dominant (6 CP) peaks (on a historical basis) and 20 also the four summer peak months (4 CP), which are the planning peaks in IPL's 21 Integrated Resource Plan ("IRP"). These methods more accurately reflect IPL's 22 electric system and capacity requirements. A 12 CP method uses the average of 23 each monthly peak for cost allocation. A method that uses the average of the 24 12 monthly peaks is only appropriate for a utility system with a flat load pattern in

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which each of the monthly coincident peaks is relatively equal. The IPL system does
not have relatively equal monthly peaks, but a dominant summer and winter peak
based on an analysis of both IPL's historical peak loads and dominant summer peaks
based on the forecast of peak loads IPL uses to determine the amount of generation
capacity required to serve load and maintain adequate reserves.

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HAVE YOU REVIEWED IPL'S IRP?

Yes. IPL's IRP dated October 31, 2014 shows how IPL plans to meet customer
needs from the current time through 2034. Exhibit NP-1, Schedule 1 Confidential
shows graphically IPL's forecast of monthly coincident peak demands for the period
2015-2020. (This pattern continues in future years as well.) The pattern shows a
dominant summer peak and a less dominant peak in winter months. The shoulder
months in the spring and fall are not relevant for future capacity needs.

Exhibit NP-1, Schedule 2 Confidential shows monthly peaks as a percent of the system peak for the entire 20 year forecast period of 2015-2034. IPL's reserve margin and capacity requirements are based on the forecast of summer peak load as illustrated on this schedule.

17QDOTHEHISTORICALMONTHLYPEAKLOADSALWAYSEXHIBITTHE18PATTERN DEPICTED IN THE IRP FORECAST?

19 A No. The test year selected by IPL contained the winter period with the polar vortex
20 which has been termed an abnormal occurrence. Exhibit NP-2, Schedule 1 shows
21 IPL's monthly peak loads on a historical basis. Exhibit NP-2, Schedule 2 shows the
22 monthly peaks as a percent of the annual system peak for the test year selected by
23 IPL which is the 12 months ended Jun 30, 2014. The test year shows winter peaks in



1 2 January and February caused by the abnormal weather and also the summer peak period of June through September.

3 Q DO YOU CONSIDER THE LOAD PATTERN IN THE TEST YEAR NORMAL?

A No. The load pattern as forecast by IPL in its IRP, which is consistent with historical
data generally evidencing peak loads during the June through September time
period, should be considered normal, not the test year's load pattern which is
distorted by the abnormal polar vortex event.

HAVE YOU REVIEWED IPL'S SYSTEM LOAD FACTOR AS FORECAST BY IPL

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FOR PLANNING PURPOSES IN ITS IRP?

10 Α Yes. System load factor is a ratio of average load to maximum or peak load on the 11 utility system. A high load factor indicates that the system load profile is flat and a low 12 load factor indicates that the system load profile has a dominant peak. Based on the 13 demand and energy forecast contained in the IRP, IPL's load factor is expected to 14 stay below 55% over the entire 20 year forecast period of 2015-2034. In fact, in 15 2034, the system load factor is only 53.3% according to data in IPL's filed IRP. This 16 means that the average load is only 53.3% of the system peak load. A utility load 17 factor below 60% basically indicates that a dominant peak exists and, consequently, 18 that use of a 12 CP methodology inaccurately reflects actual system usage.

1 Recommended Demand Allocation Method

2 Q WHAT METHOD DO YOU RECOMMEND FOR THE ALLOCATION OF 3 PRODUCTION AND TRANSMISSION INVESTMENT?

A I agree with IPL that a coincident demand method is appropriate for the allocation of
production and transmission investment. However, the average of the 12 CP method
is no longer reflective of IPL's current or projected loads. As previously discussed,
IPL clearly acknowledges the importance of the summer system peak demands and
the capacity needs, including associated cost, required to serve these demands in its
IRP.

10 Since the summer peak period is obviously critical on the IPL electric system, 11 an allocation method which utilizes the four summer peaks of June through 12 September is a conservative, yet required change, from IPL's 12 CP method which 13 treats all months as being of equal importance. To be fair, with the test year selected 14 by IPL, it is also important to review a method that looks at the peaks that occurred in 15 the months of January and February of that year. While the winter of 2014 was 16 abnormal, a fair and reasonable analysis of the test year should include these 17 months. On that basis, a 6 CP method should also be considered for this test period.

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Q PLEASE COMMENT ON THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC") TESTS REFERRED TO BY MR. TAYLOR.

A The IURC does not, and need not, follow FERC ratemaking in the determination of rate base, rate of return and income adjustments. The so-called "FERC tests" were developed as gross indicators based on historical data to "mass produce" findings by FERC which must allocate a relatively small portion of rate base within its jurisdiction for a large number of utilities. In contrast, the IURC must regulate a large portion of a single utility's rate base, in this case IPL's, and set rates that reflect costs on the
 utility's system.

3 The IURC should not rely on FERC tests for cost allocation. The IURC should 4 analyze IPL's specific usage pattern characteristics in selecting the most appropriate 5 cost of service methodology. IPL's planning peak and IRP forecasts are more 6 important than the historical data used by FERC. IPL and all other Indiana utilities 7 (and MISO) annually file a summer reliability assessment which is based on the 8 importance of meeting the next summer peak period. Therefore, using IPL's actual 9 usage pattern is the best way to meet the underlying goals of cost allocation to those 10 customers that cause the costs.

11 Allocation of Requested Rate Increase

12 Q HAVE YOU REVIEWED IPL'S RECOMMENDED ALLOCATION OF ITS 13 REQUESTED RATE INCREASE?

14 А IPL has changed its recommended allocation of the requested revenue Yes. 15 increase to customer classes in its Fifth Revision to direct testimony filed May 4. 16 2015, from its originally filed mitigation method without material explanation. IPL 17 originally submitted a reasoned approach that basically followed past practice by this 18 Commission. The approach was to reduce subsidies by 20% to all classes with 19 added constraints to limit a rate increase to any class to 10% and not allow a rate 20 decrease to any class. IPL described its originally filed approach as "mitigation." 21 Attached as Exhibit NP-3 is a copy of the "redline" IPL filed on May 4, 2015, showing 22 the changes made to its original pre-filed testimony in its Fifth Revision.

1 Q WAS IPL'S ORIGINAL APPROACH BASICALLY CONSISTENT WITH PAST 2 PRACTICE IN INDIANA?

A Yes. IPL's testimony indicated that its proposed mitigation method was consistent
with the IURC approved method in other utility rate cases and specifically with the
Indiana Michigan Order in Cause No. 44075, issued February 13, 2013.

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Q DO YOU AGREE WITH IPL'S ORIGINAL APPROACH TO THE ALLOCATION OF ANY ALLOWED RATE INCREASE TO CLASSES?

8 I have developed and proposed the uniform subsidy (sometimes called Α Yes. 9 subsidy/excess) reduction method before this Commission for many years. The 10 amount of uniform subsidy reduction that can be accomplished also takes customer 11 impact and other factors into account, but the subsidy reduction is uniform and fair to 12 all classes. IPL's originally proposed 20% subsidy reduction was the heart of the 13 approach. The constraints IPL added of no class receiving more than a 10% rate 14 increase or a rate reduction are peripheral, and to a large extent are a function of 15 other factors such as the amount of requested increase, time between rate cases and 16 the impact of tracking mechanisms.

17QWHAT REVISION DID IPL MAKE TO THE UNIFORM SUBSIDY REDUCTION18METHOD IN ITS FIFTH REVISED FILING OF TESTIMONY, FILED MAY 4, 2015?

19 A IPL removed the 20% uniform subsidy reduction central to the method without 20 explanation. IPL still maintained it was following the method recently approved in the 21 Indiana Michigan filing and IURC Order in 44075. I participated in the I&M 22 proceeding. In that case, I&M proposed and the IURC approved the use of a uniform 23 50% subsidy reduction method in allocating the authorized rate increase to customer 1 charges. Clearly, IPL is no longer following the method approved in that and other 2 cases.

3 IPL's abandonment of uniform subsidy reduction makes its revised approach 4 unfair and inconsistent with the method approved by the IURC in many utility cases, 5 including the referenced Indiana Michigan case.

6 Q WHAT DO YOU RECOMMEND FOR THIS PROCEEDING?

7 А I recommend IPL's original proposal be used to allocate any authorized rate increase 8 among IPL's customer classes. As previously explained, the 6 CP approach is most 9 reflective of the test year load pattern and is the method the IURC recently approved 10 for cost allocation in Cause No. 44075. The original mitigation method, however, 11 should be used to allocate any authorized increase using the approved cost of 12 service methodology found appropriate.

13 Q HAVE YOU DEVELOPED THE ORIGINAL MITIGATION METHOD OF 14 ALLOCATION FOR IPL'S REQUESTED INCREASE BASED ON THE 12 CP **METHOD?** 15

16 Yes. Exhibit NP-4 shows the results of the 12 CP cost of service and the 20% А 17 uniform subsidy reduction with mitigation as originally proposed by IPL.

18 Q

WHAT IS SHOWN IN EXHIBIT NP-5?

19 In Exhibit NP-5, I have replicated IPL's original approach, based on the 4 CP method. А 20 As previously stated, this method is most reflective of IPL's existing load pattern, IRP 21 and its plan to serve its customers over the next 20 years.

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Q WHAT IS SHOWN ON EXHIBIT NP-6?

2 А Exhibit NP-6, uses the 6 CP method of cost allocation with the same conditions of 3 allocating the increase to classes originally proposed by IPL. Due to the abnormal 4 winter peaks caused by the polar vortex during the test year this method is most 5 reflective of the load pattern in the test year.

6 Q WHAT ARE THE RESULTS OF THE METHODS YOU HAVE OUTLINED?

7 А A summary of the 4 CP, 6 CP and 12 CP methods, applying IPL's original mitigation 8 strategy, is shown on Exhibit NP-7, Schedule 1. The impact of using a more cost 9 reflective method on the residential class is approximately 1% at the full rate increase 10 requested by IPL and remains well below the 10% upper limit proposed by IPL's 11 original mitigation strategy. With an approved revenue increase below that proposed 12 by IPL, the impact on the residential class would be less than 1%.

13 Exhibit NP-7, Schedule 2 shows a summary of the results utilizing the 4 CP, 14 6 CP and 12 CP methods at full cost of service, without any mitigation.

15 Q WHAT IF THE RATE INCREASE REQUESTED BY IPL IS SIGNIFICANTLY 16 LOWERED BY THE COMMISSION?

17 A As noted above, combining IPL's original mitigation, a cost of service methodology 18 that more accurately reflects the cost to provide service to customers than the 12 CP 19 method chosen by IPL, and a reduction to the approved revenue increase, results in 20 a limited impact for residential customers. If the Commission approved revenue 21 increase is significantly below that proposed by IPL, and it applies an appropriate cost 22 of service methodology, the Commission could consider moving customer classes 23 more rapidly to true cost of service without fear of undue impacts to customers.

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1 Rate Design

2 Q HAVE YOU REVIEWED IPL'S PROPOSED INDUSTRIAL RATE DESIGN?

3 А Yes, IPL plans to basically increase demand charges in the 100% range and 4 eliminate declining blocks without much explanation. There is a concern with respect 5 to customer impact within each industrial rate from such an abrupt change. At least 6 one customer is projected to receive an increase significantly in excess of 10% by 7 IPL's proposed rates. It is important to avoid harsh impacts due to rate design. 8 Mitigation should not be limited to allocation of the increase to classes. Customer 9 impact due to rate design deserves the same consideration since it is the final step in 10 determining the actual increase imposed on any one customer. In addition, there is a 11 concern that customers receive only the targeted increase for their respective rate as 12 originally proposed by IPL prior to the discovery of the apparent discrepancy between 13 billing system revenue and accounting revenue which caused the Fifth Revision to 14 IPL testimony.

For this case, I recommend that each element of the rate be increased by the approved percentage increase, thus ensuring that each customer on the rate receive the targeted increase. For example, if the Commission authorizes a Rate HL-1 increase of 3%, the demand charge, energy charge and customer charge would each be increased by 3%. This approach will result in each customer on the rate receiving a 3% increase.

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Q DO YOU HAVE ANY OTHER CONCERNS WITH IPL'S APPROACH?

A Yes. As supported by Mr. Dauphinais IPL correctly proposes to increase the
 interruptible credit for HL-3. IPL, however, proposes to collect the credit only from
 HL-3 customers, including the interruptible customer. Having available interruptible

load benefits the entire system by reducing capacity needs, fuel cost and operational needs. The credit offered to a customer in exchange for the right to interrupt that customer should not be borne solely by that customer, nor solely by the limited number of customers in the same rate class. The HL-3 rate should not be designed to recover the interruptible credit as proposed by IPL. Rather, the costs of the interruptible credit should be recovered through all customers' rates to reflect the system benefits provided by interruptible load.

Q DO YOUR COST OF SERVICE MODELS REFLECT THIS PROPOSED CHANGE
 TO SHARE THE COST OF THE INTERRUPTIBLE LOAD ACROSS ALL
 CLASSES?

A No. To my knowledge, the demand data IPL used for allocation does not include an
 explicit credit to reflect interruptible load. The reallocation of this credit should be
 accomplished in the revenue allocation to classes and rate design for HL-3.

14QDO YOU HAVE COMMENTS REGARDING THE NUMBER OF TRACKING15MECHANISMS THAT EXIST AND ARE BEING PROPOSED BY IPL?

16 Yes. Tracking mechanisms are not a substitute for a fully, appropriate and fair review А 17 of utility rate design or rate levels. As the number of trackers increase, the 18 Commission should require periodic base rate filings. In this case, IPL has proposed a number of tracking mechanisms. While the Company has indicated a plan to file 19 20 another rate case in the near future, the IURC should consider whether approval of 21 the trackers is appropriate, particularly when IPL was able to delay filing a rate case 22 for approximately 20 years. To the extent the Commission approves any of IPL's 23 requested tracking mechanisms, the costs associated with those trackers should be

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allocated and recovered in the same manner as IPL's base rates because that is the
 most fair and appropriate method of matching costs associated with those trackers to
 cost causers.

4 Q HAVE YOU REVIEWED MR. CUTSHAW'S PROPOSAL REGARDING LOST 5 MARGINS?

6 A Yes. Based on Mr. Cutshaw's testimony and the IPL data response to IG Data 7 Request 6-16, attached as Exhibit NP-8, it appears IPL is relying on the 8 Commission's Order in Cause No. 44497 to propose retroactive application of rates 9 established in this proceeding to calculate lost margins associated with energy 10 savings obtained through the installation of measures during 2015 prior to an order 11 issued in this Cause.

12 Q DO YOU HAVE CONCERNS WITH THIS APPROACH?

13 А Yes, if that is IPL's proposal, I have significant concerns that go beyond my general objection to the recovery of lost margins by a utility for energy efficiency programs. 14 15 To the extent they are permitted to be recovered, lost margin revenue should be 16 based on the margin associated with rates approved for the same period that the 17 verified energy savings occur. Any claimed 2015 energy savings must use the 18 margin associated with rates in effect for the period the measure was in place during 19 2015. As this proceeding will likely not be resolved by the Commission until near the 20 close of 2015 it would be inappropriate to use rates approved in this case to calculate 21 lost margins as those rates will not have been approved. Mixing previous period 22 energy savings with future, as yet unapproved, rates is an inappropriate method of 23 determining lost margins. I would note, however, that after the order is issued in this

1 Cause, the newly approved rates are appropriate to determine lost margins for 2 savings achieved due to the installation of energy efficiency measures following the 3 effective date of the order.

4 In addition, normally, it would be expected that a base rate case filing would 5 zero-out lost margins because all sales level changes, including any changes due to 6 the installation of energy efficiency measures, should be incorporated into the setting 7 of the approved revenue requirement and rates. In that sense, the Commission 8 should carefully review the evidence to ensure that IPL will not be recovering the 9 impact of any DSM measures installed in 2015 twice - first through adjustments to 10 the test year consumption in setting base rates, and then through the recovery of 11 2015's deferred lost margins calculated using rates set in this case rather than the 12 rates in effect at the time the measures causing the lost margins were installed.

13 Q IS YOUR POSITION AN ATTEMPT TO CHANGE THE COMMISSION'S ORDER IN

14

CAUSE NO. 44497?

15 A No. I am commenting on what I understand to be IPL's position in this case. To the 16 extent the Commission authorized IPL to defer lost margins during 2015 in Cause 17 No. 44497 I do not challenge that finding. I am only questioning the appropriate rate 18 to be applied in order to determine the deferred amount, and asking the Commission 19 to ensure that IPL's calculations of lost margins for 2015 take into account the impact 20 of a base rate case on those calculations.

21 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

22 A Yes, it does.

008604

Qualifications of Nicholas Phillips, Jr.

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140,
 Chesterfield, MO 63017.

4 Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with
the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory
consultants.

8 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL 9 EMPLOYMENT EXPERIENCE.

A I graduated from Lawrence Institute of Technology in 1968 with a Bachelor of Science
 Degree in Electrical Engineering. I received a Master's of Business Administration
 Degree from Wayne State University in 1972. Since that time I have taken many
 Masters and Ph.D. level courses in the field of Economics at Wayne State University
 and the University of Missouri.

15 I was employed by The Detroit Edison Company in June of 1968 in its 16 Professional Development Program. My initial assignments were in the engineering 17 and operations divisions where my responsibilities included the overhead and 18 underground design, construction, operation and specifications for transmission and 19 distribution equipment; budgeting and cost control for operations and capital 20 expenditures; equipment performance under field and laboratory conditions; and 21 emergency service restoration. I also worked in various districts, planning system 22 expansion and construction based on increased and changing loads.

1 Since 1973, I have been engaged in the preparation of studies involving 2 revenue requirements based on the cost to serve electric, steam, water and other 3 portions of utility operations.

4 Other responsibilities have included power plant studies; profitability of various 5 segments of utility operations; administration and recovery of fuel and purchased 6 power costs; sale of utility plant; rate investigations; depreciation accrual rates; 7 economic investigations; the determination of rate base, operating income, rate of 8 return; contract analysis; rate design and revenue requirements in general.

9 I have held various positions including Supervisor of Cost of Service,
10 Supervisor of Economic studies and Depreciation, Assistant Director of Load
11 Research, and was designated as Manager of various rate cases before the Michigan
12 Public Service Commission and the Federal Energy Regulatory Commission. I was
13 acting as Director of Revenue Requirements when I left Detroit Edison to accept a
14 position at Drazen-Brubaker & Associates, Inc., in May of 1979.

15 The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and 16 has assumed the utility rate and economic consulting activities of Drazen Associates, 17 Inc., active since 1937. In April 1995, the firm of Brubaker & Associates, Inc. was 18 formed. It includes most of the former DBA principals and staff.

Our firm has prepared many studies involving original cost and annual depreciation accrual rates relating to electric, steam, gas and water properties, as well as cost of service studies in connection with rate cases and negotiation of contracts for substantial quantities of gas and electricity for industrial use. In these cases, it was necessary to analyze property records, depreciation accrual rates and reserves, rate base determinations, operating revenues, operating expenses, cost of capital and all other elements relating to cost of service. In general, we are engaged in valuation and depreciation studies, rate work,
 feasibility, economic and cost of service studies and the design of rates for utility
 services. In addition to our main office in St. Louis, the firm also has branch offices in
 Phoenix, Arizona and Corpus Christi, Texas.

5 Q WHAT ADDITIONAL EDUCATIONAL, PROFESSIONAL EXPERIENCE AND 6 AFFILIATIONS HAVE YOU HAD?

7 A I have completed various courses and attended many seminars concerned with rate
8 design, load research, capital recovery, depreciation, and financial evaluation. I have
9 served as an instructor of mathematics of finance at the Detroit College of Business
10 located in Dearborn, Michigan. I have also lectured on rate and revenue requirement
11 topics.

12 Q HAVE YOU PREVIOUSLY APPEARED BEFORE A REGULATORY COMMISSION?

13 Yes. I have appeared before the New Jersey Board of Public Utilities, the Public А 14 Service Commissions of Arkansas, Delaware, Illinois, Indiana, Iowa, Kansas, 15 Kentucky, Maryland, Michigan, Missouri, Montana, New Jersey, New York, North 16 Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Virginia, West Virginia, 17 and Wisconsin, the Lansing Board of Water and Light, the District of Columbia, and 18 the Council of the City of New Orleans in numerous proceedings concerning cost of 19 service, rate base, unit costs, pro forma operating income, appropriate class rates of 20 return, adjustments to the income statement, revenue requirements, rate design, 21 integrated resource planning, power plant operations, fuel cost recovery, regulatory 22 issues, rate-making issues, environmental compliance, avoided costs, cogeneration,

cost recovery, economic dispatch, rate of return, demand-side management,
 regulatory accounting and various other items.

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EXHIBIT NP-1, SCHEDULE 1 THIS EXHIBIT IS CONFIDENTIAL

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EXHIBIT NP-1, SCHEDULE 2 THIS EXHIBIT IS CONFIDENTIAL

Monthly Peaks as a Percent of System Peak for Years 2008 through 2013



<u>Source:</u> IG DR 5-13 Atlachment 1, IPL - Cause No 44576, Page 1 of 3

013800

Exhibit NP-2 Schedule 2

Indianapolis Power & Light Company

Monthly Peaks as a Percent of System Peak for Test Year Ending June 30, 2014



System Peak



Source: IG DR 5-13 Attachment 1, IPL - Cause No 44576, Page 1 of 3

1

III. DESCRIPTION OF PROPOSED CLASS REVENUE REQUIREMENTS

- 2 Q12. What total electric revenue requirement is the Company proposing in this 3 proceeding?
- A12. The Company has a total revenue requirement of \$1,271 million as shown on line 43 of
 Petitioner's Witness JDT Attachment-3 (Revised). Because the Company collects
 miscellaneous other revenue from ancillary charges and off-system sales, the proposed
 rates are designed to collect Base Rate revenue of \$1,244 million from the retail
 customers, as shown on line 49 of Petitioner's Witness JDT Attachment-3 (Revised).

9 Q13. Was an allocated cost of service study (ACOSS) used to establish initial revenue
 10 responsibility levels at the Company's proposed revenue requirement for each rate
 11 schedule?

12 A13. Yes. The ACOSS study was conducted by me. This study appears in Petitioner's 13 Witness JDT Workpaper 1.0 (<u>Revised</u>) and a summary of the results appears in JDT 14 Attachment-3 (<u>Revised</u>) of my COSS testimony. I used this study as a starting point and 15 a guide in designing the rates proposed in this proceeding.

Q14. Have you examined the percentage rate increases that would be required for each
 rate schedule according to the Allocated Cost of Service Study?

 18
 A14. Yes. Column C on pages 1 and 2 of Petitioner's Witness JSG Attachment-2 (Revised)

 19
 presents normalized revenues that IPL can expect to recover from each rate schedule at

 20
 current rates, while column D of that attachment shows the allocated cost of service for

 21
 each schedule. Note that column D includes the portion of the increased revenue

 22
 requirement that will be achieved by increasing the rates for ancillary charges, as

 23
 discussed in the



Exhibit NP-3 Page 2 of 8 Indianapolis Power and Light Company Page 7 of 16 (Revised)

1 testimony of IPL Witness Ms. Chambers. Column F shows the percentage 2 increase/decrease in base rates that would be required if ACOSS-based rates were to be 3 applied. Although the overall rate increase that the Company is requesting is somewhat less than six percent, the ACOSS study indicates that the residential class would require a 4 5 rate increase of more than 13 percent and some individual rate schedules would require 6 rate increases of as much as 50 percent. Rate increases of these magnitudes could cause 7 rate shock for individual rate schedules. Consequently, it was determined that the 8 percentage rate increases experienced by individual rate schedules should be mitigated.

9 A. Mitigation of Class Impacts

10 Q15. How did you go about mitigating the class rate increases?

11 I started with primarily used an approach that the IURC has approved in other utility rate A15. cases, including a case involving Indiana Michigan Power Company.¹ That approach 12 13 first calculates the subsidy that each rate schedule is currently paying, as measured by the 14 difference between the revenue collected during the test year, and the amount of revenue 15 that was required in order for each rate schedule to generate the system-wide average rate 16 of return. This approach In consultation with the Company, I then determineds an 17 amountproportion of the subsidy at current rates that it would be appropriate to eliminate 18 in the current rate case.

19I was also guided by certain other goals that the Company wanted to achieve. These20included: (i) residential class rate increase less than 10 percent; (ii) no rate schedule to21receive a rate decrease. The resulting rate mitigation achieves these goals.

¹ Indiana Michigan Power Company, Cause No. 44075 (IURC 2/13/13).

Exhibit NP-3 Page 3 of 8 Indianapolis Power and Light Company Page 8 of 16 (Revised)

Please describe the calculations that you performed in mitigating the rate increases. 1 016. 2 The subsidy that each class and rate schedule is paying or receiving at current rates is shown in A16. 3 column G of Petitioner's Witness JSG Attachment-2 (Revised), page 2. That column, which is 4 calculated on line 31 of Petitioner's Witness JDT Attachment-3_(Revised), shows the difference between (i) the total revenues that each rate schedule paid on a normalized basis during the test year 5 (line 8 of Petitioner's Witness JDT Attachment-3 (Revised)eolumn C), and (ii) the revenues 6 7 required if each rate schedule had generated an equal rate of return during the test year (line 30 of 8 Petitioner's Witness JDT Attachment-3 (Revised)). As shown on lines 18 and 19 of Petitioner's 9 Witness JDT Attachment-3 (Revised), at present rates there is a wide variation in the rates of return 10 generated by each rate schedule. For example, the residential and large commercial and industrial

rate schedules are below the average rate of return for IPL during the test year, while the Secondary

12 Small rate schedule generated an above-average rate of return.

11

13 In consultation with the Company, I determined that reduceding the required rate increases by an 14 amount equal to 20 percent of the subsidy at current rates that would provide nearly all rate schedules 15 a rate increase less than 10 percent. However, that mitigation factor left the CB and APL rate schedules with double-digit rate increases and Although the ACOSS indicated that the MU schedule 16 17 with could receive a rate decrease. Consequently, I calculated a zero (0.0%) percent change for the 18 MU schedule and balanced that change by reducing the CB and APL rate schedule revenue 19 requirements for other rate schedules such as the CB and APL rate schedules that could experienceto 20 an amount that keeps their rate increases greater thanunder 10 percent without rate mitigation. The resulting rate increases are shown in column I of Petitioner's Witness JSG Attachment-2 (Revised) 21 22 and the percentage rate increases are shown in column J. As a result of this mitigation, the rate 23 increase for every rate schedule has been constrained to a range between 0.0 percent and $\frac{8.69.2}{100}$ 24 The overall effect is to move classes and rate schedules closer to cost-ofpercent.

1

3

2 rate schedule. What revenue requirement do you propose for each rate schedule in this 017.

service based rates in this proceeding while avoiding extreme rate increases for any single

4 proceeding?

5 A17. Column K of Petitioner's Witness JSG Attachment-2 (Revised) shows the proposed pro 6 forma revenue for each rate class and rate schedule that is produced by the ACOSS 7 analysis and my rate mitigation calculations. A summary comparison of the mitigated 8 and unmitigated revenue and required rate increases is also shown on Petitioner's 9 Witness JSG Attachment-3 (Revised).

10 What rate of return would be generated by each rate schedule at the proposed 018. 11 mitigated revenue requirements?

12 The pro forma rates of return that would be produced by each rate schedule at the A18. 13 proposed mitigated revenue requirements are shown on line 64 of Petitioner's Witness 14 JDT Attachment-3 (Revised).

15

В. **Rate Design**

16 Were there certain general principles that you followed in designing rates for 019. 17 individual rate schedules?

18 A19. One principle that I applied was to move the components of the rate design closer to a 19 level that reflects the marginal cost associated with usage. To do that, I generally 20 increased the customer charges and/or the demand charges to a level that recovers a 21 higher proportion of the fixed costs of service. In doing so, the proportion of the fixed 22 costs recovered through variable energy charges was reduced.

Exhibit NP-3 Page 5 of 8 Indianapolis Power and Light Company Page 10 of 16 (Revised)

1 With respect to the residential customers I attempted to design rates that recovered a 2 higher proportion of fixed costs in the customer charge and also tried to meet several 3 additional criteria. First, approximately 90 percent of the residential customers should 4 experience a rate increase of less than \$10.00 per month. Second, the smallest customers 5 (in terms of least kWh of consumption) should receive increases of less than \$5.00 per 6 month. Third, customers who consume more should receive larger rate increases in their 7 monthly bill than smaller customers. The result of this third criterion is that larger 8 residential customers will experience a larger dollar increase, but a lower percentage 9 increase, in their monthly bills than smaller customers.

10 **Q20.**

How were the proposed rates for each rate schedule calculated?

A20. Detailed calculations for each rate component of each rate schedule and a proof of
proposed revenues by rate schedule is shown on Petitioner's Witness JSG Attachment-4
(Revised). As the attachment shows, the proposed total revenue requirement for each
rate schedule will be achieved by implementing the proposed rates and volumes.

15 Q21. Do the proposed rates include increases to the existing monthly customer charges?

16 A21. Yes. The proposed rates would increase the Residential monthly customer charge for the 17 small customers from its current level of \$6.70 to the proposed level of \$11.25, and the 18 customer charge for the larger customers would be increased from \$11.00 to \$17.00. 19 Similarly, the Small Secondary service monthly customer charges would be increased 20 from its current level of \$11.38 to the proposed level of \$30 for the smallest customers on 21 that rate schedule, and the largest customers would receive an increase from the current 22 level of \$32.15 to the proposed level of \$50.00. All of these changes are being made in 23 order to more closely reflect the costs of serving each customer, as indicated by the



Exhibit NP-3 Page 6 of 8 Indianapolis Power and Light Company Page 11 of 16 (Revised)

1 ACOSS. For example, the unit costs resulting from the ACOSS are shown near the 2 bottom of Petitioner's Witness JDT Attachment-3 (Revised). For the Residential class 3 the cost-based customer charge would be approximately \$65 and for the Small Secondary 4 rate schedule the cost-based customer charge would be approximately \$168. Thus, 5 although the increases in customer charges for these rate schedules move in the direction 6 of recovering more of the fixed costs in the customer charge, a substantial portion of 7 fixed costs will still be recovered in the variable energy charge component of the rates for 8 these customers.

9 Q22. How are you proposing to recover fixed costs in the variable energy charge 10 component of the residential and small commercial rate schedules?

A22. The existing declining-block rate structure for these two rate schedules is retained in the proposed rates. For the residential (RS) class the rates per kWh are highest for the first 500 kWh and lower for amounts over 500 kWh. Residential water heating and space heating customers also are eligible for a lower third block for consumption over 1,000 kWh in a month. For the small commercial (SS) customers, the first 5,000 kWh each month will be charged at a higher rate, and a somewhat lower rate will be charged for amounts over 5,000 kWh.

Because the residential and small commercial customers generally do not have meters that measure their peak monthly demand and allow fixed, demand-related costs to be recovered through a demand charge, a declining block rate structure is a second-best way to recover the fixed costs that are not recovered in the customer charge. IPL's declining block rate structure for these rate schedules helps ensure that an appropriate level of fixed costs are recovered from each customer while also reducing the amount of fixed costs



loaded into the marginal energy charges of most customers. This blocking structure
 provides better price signals for efficient consumption and also reduces the variability of

3

l

4 Q23. What other changes have you made to the rate design?

A23. One proposed change is to eliminate the block structure for the demand charges in the
Large Commercial and Industrial rate schedules. These rate schedules currently have one
demand charge for the smaller customers on the rate schedule, as measured by kW of
demand, and a slightly lower demand charge for larger customers. The proposed rate
design will have just a single demand charge that applies to all customers on a rate.

the Company's earnings associated with year-to-year fluctuations in usage.

10 Q24. What principles did you use in designing the rates?

11 A24. I generally started with the amount of the revenue requirement for each rate schedule and 12 subtracted out the base fuel costs to derive the amount of the margin that would need to 13 be collected. If there is a customer charge in the rate, I generally set that at a level close 14 to the level of customer-related costs calculated on Petitioner's Witness JDT Attachment-15 3 (Revised) attachment. For rate schedules without demand meters, I then set the energy 16 charge at a level that would recover the remaining portion of the revenue requirement. As discussed earlier, I generally used a declining block rate design for such customers. 17 18 For rate schedules that have demand meters, I designed the rates to recover most of the 19 remaining fixed costs in a demand charge. Energy charges for those rate schedules are 20 designed to recover the fuel and variable energy costs, plus a margin of approximately 21 one mill per kWh.

Exhibit NP-3 Page 8 of 8 Indianapolis Power and Light Company Page 15 of 16 (Revised)

1		It should be noted that, by definition, none of the "new" lights currently exist. Thus, the
2		proposed rates for new lights do not nose a rate increase for any customers. However the
2		proposed rates for new lights do not pose a rate increase for any customers. However, the
3		purpose of setting a separate set of rates for new lights is to provide the appropriate price
4		signals to customers who are contemplating installation of new lights and to ensure that
5		the Company is able to recover the higher cost of installing new lights.
6		C. <u>Rider No. 14 - Interruptible Power Credit</u>
7	Q29.	How did you establish the amount of the credit that will be offered to customers who
8		elect to take service under Interruptible Rider No. 14?
9	A29.	Rider No. 14 currently provides a credit of \$3 per kW to the demand charge of industrial
10		customers who are willing and able to have their load interrupted when required by the
11		Company to meet constraints on system capacity. The Company proposes to increase the
12		credit amount to \$6.00 per kW. This change is reasonable given the estimated avoided
13		cost of a new combustion turbine published by the U.S. Energy Information
14		Administration in its 2013 Annual Energy Outlook.
15	IV.	REVENUE PROOF AND TYPICAL BILLS
16	Q30.	Do you have an attachment that shows the rate components and revenue that will be

17

collected from each rate schedule at the proposed rates?

- 18 A30. Yes. Petitioner's Witness JSG Attachment-4 (<u>Revised</u>) demonstrates that the targeted
 19 total revenue for each rate schedule will be achieved using the proposed rates and
 20 normalized test period volumes. Petitioner's Witness JSG Attachment-5 shows the new
 21 rates that are being proposed in this proceeding.
- Q31. Do you have an attachment that shows how the proposed rates will affect various
 residential customers?
 008619

Summary of Class Cost of Service Results Twelve Months Ending June 30, 2014 As Adjusted 12CP (Revised) Method for Generation and Transmission Demand Allocators (Dollars in Thousands)

					Total		Net	P	resent Ra	ites	Proposed	Pro	posed Ra	ates	Company	
				Retail	Operating	Operating	Operating	Rate of			Operating	Rate of			Proposed	Percent
<u>Line</u>	Rate Class		Rate Base	<u>Revenue</u>	<u>Revenue</u>	Expense	Income	<u>Return</u>	Index	<u>Subsidies</u>	Income	<u>Return</u>	<u>Index</u>	<u>Subsidies</u>	Increase	<u>Increase</u>
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Residential	RS	\$ 889,233	\$ 465,529	\$ 480,880	\$ 458,809	\$ 22,070	2.48%	0.51	\$ (34,978)	\$ 44,485	5.00%	0.72	\$ (27,983)	\$ 36,606	7.86%
2	Secondary Small	SS	185,397	136,471	138,681	113,813	24,868	13.41%	2.75	25,881	25,527	13.77%	1.99	20,705	1,299	0.95%
3	Sp. Conditioning	SH	80,873	45,159	45,924	43,668	2,257	2.79%	0.57	(2,760)	4,252	5.26%	0.76	(2,208)	3,371	7.46%
4	Sp. Cond Schools	SE	2,813	1,607	1,633	1,522	111	3.95%	0.81	(43)	174	6.18%	0.89	(34)	107	6.64%
5	Water Heating - Cont.	CB	98	44	45	52	(7)	-7.14%	(1.46)	(19)	(5)	-4.96%	(0.72)	(19)	4	8.20%
6	Water Heating - Uncont.	UW	182	115	117	112	5	2.87%	0.59	(6)	10	5.32%	0.77	(5)	8	6.56%
7	Secondary Large	SL	433,183	289,397	293,627	262,174	31,452	7.26%	1.49	16,901	38,298	8.84%	1.28	13,521	11,793	4.07%
8	Primary	PL	148,292	90,080	91,443	85,032	6,411	4.32%	0.89	(1,339)	9,620	6.49%	0.94	(1,071)	5,452	6.05%
9	Process Heating	PH	9,975	5,468	5,560	5,249	312	3.13%	0.64	(285)	551	5.53%	0.80	(228)	405	7.41%
10	HLF - Primary	HL1	142,308	89,838	91,171	85,579	5,592	3.93%	0.81	(2,202)	8,783	6.17%	0.89	(1,762)	5,418	6.03%
11	HLF - Sub-Tran	HL2	24,205	14,969	15,178	14,330	848	3.50%	0.72	(543)	1,411	5.83%	0.84	(434)	955	6.38%
12	HLF - Tran	HL3	32,870	21,706	21,990	20,924	1,066	3.24%	0.66	(878)	1,848	5.62%	0.81	(702)	1,326	6.11%
13	Auto Protective Ltg	APL	8,834	5,943	6,184	7,566-	(1,382)	-15.64%	(3.20)	(2,966)	(1,085)	-12.28%	(1.77)	(2,771)	507	8.53%
14	Municipal Ltg	MU1	6,729	10,748	11,126	8,818	2,308	34.30%	7.03	3,238	2,299	34.16%	4.93	2,992	-	0.00%
15	System Total		\$ 1,964,992	\$ 1,177,074	\$ 1,203,560	\$ 1,107,648	\$ 95,912	4.88%	1.00	\$ 0	\$ 136,167	6.93%	1.00	\$0	\$ 67,250	5.71%

Source:

IPL CONFIDENTIAL Workpaper 1.0 - IPL Witness JDT Attachment 3 (revised).xlsm with the GEN_CP and TRANS_CP factors at the 12CP allocation

Summary of Class Cost of Service Results Twelve Months Ending June 30, 2014 As Adjusted 4CP (Revised) Method for Generation and Transmission Demand Allocators (Dollars in Thousands)

					Total		Net	P	resent Ra	ates		Proposed	Pro	posed Ra	ates	Company	
				Retail	Operating	Operating	Operating	Rate of				Operating	Rate of			Proposed	Percent
Line	Rate Class		<u>Rate Base</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Expense</u>	Income	<u>Return</u>	Index	Subsidie:	<u>s</u>	<u>Income</u>	<u>Return</u>	Index	<u>Subsidies</u>	<u>Increase</u>	<u>Increase</u>
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)	(12)	(13)	(14)
1	Residential	RS	\$ 930,051	\$ 465,529	\$ 481,047	\$ 466,114	\$ 14,932	1.61%	0.33	\$ (49,91	0)	\$ 39,998	4.30%	0.62	\$ (39,928)	\$ 40,995	8.81%
2	Secondary Small	SS	179,386	136,471	138,657	112,738	25,919	14.45%	2.96	28,08	30	26,187	14.60%	2.11	22,464	653	0.48%
3	Sp. Conditioning	SH	70,661	45,159	45,883	41,840	4,042	5.72%	1.17	97	76	5,375	7.61%	1.10	781	2,273	5.03%
4	Sp. Cond Schools	SE	2,585	5 1,607	1,632	1,481	151	5.84%	1.20	4	11	199	7.70%	1.11	33	82	5.11%
5	Water Heating - Cont.	CB	87	4 4	45	50	(5)	-5.80%	(1.19)	(1	15)	(3)	-3.76%	(0.54)	(15)	3	6.84%
6	Water Heating - Uncont.	UW	143	3 115	117	104	12	8.55%	1.75		9	14	9.87%	1.42	7	3	2.83%
7	Secondary Large	SL	425,641	289,397	293,596	260,824	32,771	7.70%	1.58	19,66	50	39,127	9.19%	1.33	15,728	10,982	3.79%
8	Primary	PL	145,714	90,080	91,433	84,571	6,862	4.71%	0.96	(39	96)	9,904	6.80%	0.98	(317)	5,175	5.74%
9	Process Heating	ΡH	7,832	5,468	5,552	4,865	687	8.77%	1.80	49	99	787	10.05%	1.45	399	175	3.20%
10	HLF - Primary	HL1	135,920	89,838	91,145	84,436	6,709	4.94%	1.01	13	35	9,485	6.98%	1.01	108	4,731	5.27%
11	HLF - Sub-Tran	HL2	23,903	14,969	15,177	14,276	901	3.77%	0.77	(43	32)	1,445	6.04%	0.87	(346)	922	6.16%
12	HLF - Tran	HL3	30,572	21,706	21,981	20,513	1,468	4.80%	0.98	(3	37)	2,100	6.87%	0.99	(30)	1,079	4.97%
13	Auto Protective Ltg	APL	7,474	5,943	6,179	7,323	(1,144)	-15.30%	(3.14)	(2,46	68)	(1,048)	-14.02%	(2.02)	(2,557)	177	2.98%
14	Municipal Ltg	MU1	5,025	10,748	11,119	8,513	2,606	51.86%	10.63	3,86	61	2,598	51.70%	7.46	3,674	-	0.00%
15	System Total		\$ 1,964,992	\$ 1,177,074	\$ 1,203,560	\$ 1,107,648	\$ 95,912	4.88%	1.00	\$	0	\$ 136,167	6.93%	1.00	\$0	\$ 67,250	5.71%

Source:

IPL CONFIDENTIAL Workpaper 1.0 - IPL Witness JDT Attachment 3 (revised).xlsm with the GEN_CP and TRANS_CP factors modified to a 4CP allocation

Summary of Class Cost of Service Results Twelve Months Ending June 30, 2014 As Adjusted 6CP (Revised) Method for Generation and Transmission Demand Allocators (Dollars in Thousands)

					Total		Net	P	resent Ra	ates	Proposed	Pro	posed Ra	ates	Company	
				Retail	Operating	Operating	Operating	Rate of			Operating	Rate of			Proposed	Percent
<u>Line</u>	Rate Class		<u>Rate Base</u>	Revenue	<u>Revenue</u>	Expense	Income	<u>Return</u>	Index	<u>Subsidies</u>	<u>Income</u>	Return	Index	Subsidies	Increase	Increase
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Residential	RS	\$ 932,96	9 \$ 465,529	\$ 481,059	\$ 466,637	\$ 14,422	1.55%	0.32	\$ (50,978)	\$ 39,677	4.25%	0.61	\$ (40,782)	\$ 41,308	8.87%
2	Secondary Small	SS	180,13	7 136,471	138,660	112,872	25,787	14.32%	2.93	27,805	26,105	14.49%	2.09	22,244	733	0.54%
3	Sp. Conditioning	SH	80,91	3 45,159	45,924	43,675	2,249	2.78%	0.57	(2,775)	4,248	5.25%	0.76	(2,220)	3,375	7.47%
4	Sp. Cond Schools	SE	2,68	1 1,607	1,632	1,498	134	5.01%	1.03	6	189	7.04%	1.02	5	92	5.75%
5	Water Heating - Cont.	CB	9	2 44	45	51	(6)	-6.51%	(1.33)	(17)	(4)	-4.40%	(0.63)	(17)	3	7.52%
6	Water Heating - Uncont.	UW	16	4 115	117	108	8	5.19%	1.06	1	12	7.17%	1.03	1	6	4.82%
7	Secondary Large	SL	414,27	4 289,397	293,549	258,790	34,759	8.39%	1.72	23,818	40,376	9.75%	1.41	19,055	9,760	3.37%
8	Primary	ΡL	141,51	3 90,080	91,416	83,819	7,597	5.37%	1.10	1,141	10,365	7.32%	1.06	913	4,723	5.24%
9	Process Heating	PH	9,41	8 5,468	5,558	5,149	409	4.34%	0.89	(82)	613	6.50%	0.94	(65)	345	6.32%
10	HLF - Primary	HL1	134,63	0 89,838	91,139	84,205	6,934	5.15%	1.06	607	9,627	7.15%	1.03	485	4,593	5.11%
11	HLF - Sub-Tran	HL2	22,88	1 14,969	15,173	14,093	1,080	4.72%	0.97	(58)	1,557	6.80%	0.98	(47)	812	5.43%
12	HLF - Tran	HL3	29,62	3 21,706	21,977	20,343	1,633	5.51%	1.13	309	2,204	7.44%	1.07	247	978	4.50%
13	Auto Protective Ltg	APL	8,96	4 5,943	6,185	7,589	(1,404)	-15.67%	(3.21)	(3,014)	(1,099)	-12.26%	(1.77)	(2,809)	521	8.77%
14	Municipal Ltg	MU1	6,73	2 10,748	11,126	8,819	2,308	34.27%	7.02	3,236	2,298	34.13%	4.93	2,991	-	0.00%
15	System Totai		\$ 1,964,99	2 \$1,177,074	\$ 1,203,560	\$ 1,107,648	\$ 95,912	4.88%	1.00	\$0	\$ 136,167	6.93%	1.00	\$0	\$ 67,250	5.71%

Source:

IPL CONFIDENTIAL Workpaper 1.0 - IPL Witness JDT Attachment 3 (revised).xlsm with the GEN_CP and TRANS_CP factors modified to a 6CP allocation

Summary of Class Proposed Increases for 4CP, 6CP and 12CP Generation and Transmission Allocation Factors with Original Mitigation Method <u>Twelve Months Ending June 30, 2014 As Adjusted</u>

			Proposed Increases Under						
		_	Assorted Der	nand Allocatio	n Methods				
			4CP	6CP	12CP				
<u>Line</u>	Rate Class	_	<u>Method</u>	<u>Method</u>	Method				
			(1)	(2)	(3)				
1	Residential	RS	8.81%	8.87%	7.86%				
2	Secondary Small	SS	0.48%	0.54%	0.95%				
3	Sp. Conditioning	SH	5.03%	7.47%	7.46%				
4	Sp. Cond Schools	SE	5.11%	5.75%	6.64%				
5	Water Heating - Cont.	CB	6.84%	7.52%	8.20%				
6	Water Heating - Uncont.	UW	2.83%	4.82%	6.56%				
7	Secondary Large	SL	3.79%	3.37%	4.07%				
8	Primary	PL	5.74%	5.24%	6.05%				
9	Process Heating	PH	3.20%	6.32%	7.41%				
10	HLF - Primary	HL1	5.27%	5.11%	6.03%				
11	HLF - Sub-Tran	HL2	6.16%	5.43%	6.38%				
12	HLF - Tran	HL3	4.97%	4.50%	6.11%				
13	Auto Protective Ltg	APL	2.98%	8.77%	8.53%				
14	Municipal Ltg	MU1	0.00%	0.00%	0.00%				
15	System Total		5.71%	5.71%	5.71%				

Summary of Class Proposed Increases for 4CP, 6CP and 12CP Generation and Transmission Allocation Factors without Mitigation <u>Twelve Months Ending June 30, 2014 As Adjusted</u>

	Proposed Increases Under							
			Assorted Der	n Methods				
		_	4CP	6CP	12CP			
<u>Line</u>	Rate Class	_	<u>Method</u>	<u>Method</u>	<u>Method</u>			
			(1)	(2)	(3)			
1	Residential	RS	17 38%	17 63%	13 87%			
2	Secondary Small	SS	-15 98%	-15 76%	-14 22%			
3	Sp. Conditioning	SH	3 30%	12.39%	12.35%			
4	Sp. Cond Schools	SE	3.09%	5.46%	8.77%			
5	Water Heating - Cont.	CB	41.33%	46.41%	51.52%			
6	Water Heating - Uncont.	UW	-3.14%	4.25%	10.76%			
7	Secondary Large	SL	-1.64%	-3.21%	-0.60%			
8	Primary	PL	6.10%	4.23%	7.24%			
9	Process Heating	PH	-4.10%	7.51%	11.58%			
10	HLF - Primary	HL1	5.15%	4.57%	7.99%			
11	HLF - Sub-Tran	HL2	8.47%	5.74%	9.28%			
12	HLF - Tran	HL3	5.11%	3.36%	9.35%			
13	Auto Protective Ltg	APL	46.00%	56.04%	55.16%			
14	Municipal Ltg	MU1	-34.18%	-27.83%	-27.84%			
15	System Total		5.71%	5.71%	5.71%			

Data Request IG DR 6 - 16

IPL's testimony indicates that it does not intend to seek recovery of any deferred lost revenues associated with EE savings attributable to IPL's DSM programs until its next DSM tracker proceeding. (*See* Cutshaw at Page 25 lns. 6-19). With respect to IPL's proposal regarding lost revenue calculations, please answer the following:

- a. Is IPL asking for approval of specific Lost Revenue Margin Rates in this proceeding?
- b. In calculating the deferred amount of lost revenue for recovery, is it IPL's intention to apply base rates approved in this proceeding (and adjusted as shown in Mr. Cutshaw's Attachment 1) to savings achieved prior to an order issued in this Cause approving those rates?
- c. If the answer to subpart (b) above is "No", please explain how IPL proposes to calculate its level of lost margins for the period between January 1, 2015 and the date of an order approving new rates in this Cause.
- d. If the answer to subpart (b) above is "Yes", please explain the legal basis supporting IPL's position.

Objection:

Response:

- a. Yes.
- b. Yes.
- c. Not applicable.
- d. IPL proposes to use the base rates approved in this Cause to calculate the deferral of revenues to recognize in future rates in accordance with the Ordering Paragraph 4 of the December 17, 2017 Order in Cause No. 44497:

"Petitioner is granted authority to defer, as modified above, for subsequent recovery following its next retail electric base rate case, the lost revenue resulting from implementation of the 2015-2016 DSM Plan; recovery of such deferred lost revenues shall be made consistent with an updated cost-of-service study approved in Petitioner's next base rate case."

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANAPOLIS POWER & LIGHT COMPANY ("IPL") FOR AUTHORITY TO INCREASE RATES AND CHARGES FOR ELECTRIC UTILITY SERVICE AND FOR APPROVAL OF: (1) ACCOUNTING RELIEF, INCLUDING IMPLEMENTATION OF MAJOR STORM DAMAGE **RESTORATION RESERVE ACCOUNT: (2) REVISED DEPRECIATION RATES; (3) THE INCLUSION IN BASIC** RATES AND CHARGES OF THE COSTS OF CERTAIN PREVIOUSLY APPROVED QUALIFIED POLLUTION CONTROL PROPERTY; (4) IMPLEMENTATION OF NEW OR MODIFIED RATE ADJUSTMENT MECHANISMS TO TIMELY RECOGNIZE FOR RATEMAKING PURPOSES LOST REVENUES FROM DEMAND-SIDE MANAGEMENT PROGRAMS AND CHANGES IN (A)CAPACITY PURCHASE COSTS; (B) REGIONAL TRANSMISSION ORGANIZATION COSTS; AND (C) OFF SYSTEM SALES MARGINS; AND (5) NEW SCHEDULES OF RATES, RULES AND REGULATIONS FOR SERVICE.

IN THE MATTER OF THE INDIANA UTILITY REGULATORY COMMISSION'S INVESTIGATION INTO INDIANAPOLIS POWER & LIGHT COMPANY'S ONGOING INVESTMENT IN, AND OPERATION AND MAINTENANCE OF, ITS NETWORK FACILITIES. CAUSE NO. 44576

CAUSE No. 44602

VERIFICATION

I, Nicholas Phillips, Jr., a Consultant and Managing Principal of Brubaker & Associates, Inc., affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Micholu Milling, Jr.

Nicholas Phillips, Jr. July 27, 2015