

FILED

October 16, 2017

Petitioner's Exhibit 1 SR

INDIANA UTILITY
REGULATORY COMMISSION

PRE-FILED VERIFIED SETTLEMENT REBUTTAL TESTIMONY

OF

LESTER H. ALLEN

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

CAUSE NO. 44945

**VERIFIED SETTLEMENT REBUTTAL TESTIMONY OF LESTER H. ALLEN
ON BEHALF OF
INDIANAPOLIS POWER & LIGHT COMPANY**

1 **I. Introduction**

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

3 A1. My name is Lester H. Allen. I am employed by Indianapolis Power & Light Company
4 ("IPL" or the "Company"), One Monument Circle, Indianapolis, Indiana 46204.

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

6 A2. I am DSM Program Development Manager.

7 **Q3. Are you the same Lester H. Allen who previously submitted direct and settlement**
8 **testimony in this Cause?**

9 A3. Yes.

10 **Q4. What is the purpose of your settlement rebuttal testimony in this proceeding?**

11 A4. The purpose of my settlement rebuttal testimony is to address issues raised by the direct
12 and settlement testimony of Edward Rutter, on behalf of the Office of Consumer
13 Counselor ("OUCC"), including the OUCC opposition to the Settlement Agreement.

14 **Q5. Are other IPL witnesses presenting settlement rebuttal?**

15 A5. Yes. IPL Witness Miller will address Mr. Rutter's testimony regarding the cost and
16 benefit analysis. IPL Witness Miller also responds to Mr. Rutter's discussion of IPL's
17 use of program costs, and addresses his recommendation that DSM cost recovery should
18 not exceed 50% of the net benefits of the Utility Cost Test ("UCT"). He will address Mr.

1 Rutter's contention that the energy savings reflected in the Settlement Agreement are not
2 consistent with the Company's 2016 Integrated Resource Plan ("IRP") or otherwise
3 compliant with Section 10 requirements. Finally, Mr. Miller responds to Mr. Rutter's
4 testimony regarding Section 10 (j) (7) and points out where the short term and long term
5 impact rate impact to customers is described in IPL's testimony.

6 **Q6. Are you sponsoring any attachments?**

7 A6. Yes, I am sponsoring:

- 8 • Petitioner's Attachment LHA-1SR – Updated 2016 Portfolio Summary reflecting
9 flexibility spending;
- 10 • Petitioner's Attachment LHA-2SR – minutes from the November 2016 OSB
11 meeting; and
- 12 • Petitioner's Attachment LHA-3SR – correction to Mr. Rutter's alternative
13 breakeven analysis.

14 **Q7. Do you have any additional workpapers?**

15 A7. Yes. I have submitted a workpaper underlying my calculation of the first year average
16 cost per kWh.

17 **II. GENERAL**

18 **Q8. Do you have any overall response to the OUCC's opposition to Commission approval**
19 **of IPL's 2018-2020 DSM Plan as modified by the Settlement Agreement?**

1 A8. Yes. The Settlement Agreement that IPL has reached with the Citizens Action Coalition
2 (“CAC”) represents a reasonable compromise to our original DSM Plan as filed in Direct
3 Testimony. The testimony in support of the Settlement Agreement explains its terms and
4 reconciles the Settlement with the requirements of Section 10 and contested issues. Mr.
5 Rutter’s testimony in opposition to the Settlement Agreement, says little in direct
6 response to the settlement testimony.

7 As I indicated in my settlement testimony, IPL has been and remains enthusiastic to move
8 forward with this DSM Plan for the benefit of our customers. Timely approval is
9 important, in that the proposed portfolio includes enhancements to several programs that
10 are expected to provide additional saving opportunities and improve the customer
11 experience and their satisfaction.

12 I also offer the following general comments on the topics identified below:

13 **Cost Recovery Including Lost Revenues**

14 Much of Mr. Rutter’s testimony reflects the same positions taken in his direct testimony,
15 many of which are at odds with the public policy reflected in Section 10. For example,
16 the OUCC challenges the statutory definition of “lost revenues” and the statutory
17 requirement of timely cost recovery through a rate adjustment mechanism. Nevertheless,
18 our task in this proceeding is to implement Section 10, not debate it.

19 **Flexible Spending and Rollover of Funds**

20 The OUCC’s opposition to the rollover and flexible spending provisions of the
21 Settlement Agreement are perplexing because these provisions merely reflect

1 mechanisms that have previously been approved by prior Commission Orders, that are
2 currently in place, and that provide IPL with necessary flexibility (subject to the approval
3 of the IPL OSB) to implement multi-year plans. The flexible spending and roll-over
4 provisions that are part of that compromise are not new. These provisions are consistent
5 with how the IPL OSB has administered the programs for a number of years using this
6 Commission's approved spending authority. These provisions are largely reflective of
7 IPL's original plan components which the OUCC did not contest.

8 **Customer Benefits and Financial Incentives**

9 The OUCC's analysis of the Plan cost and the OUCC's proposed constraint on program
10 cost recovery are not based on the standard application of the Utility Cost Test ("UCT").
11 While Mr. Rutter uses the term "UCT," he has altered the test by including lost revenues
12 as a cost. In doing so, he distorts the purpose of the test which is designed to assess the
13 revenue requirement impact of investments in demand side versus supply side resources.
14 As discussed by IPL Witness Miller, Mr. Rutter's methodology double counts program
15 operating costs. Furthermore, by adding lost revenues to the analysis, Mr. Rutter's
16 modifications convert the UCT to something closer to the Rate Impact Measure ("RIM")
17 Test. This misapplication of the benefit cost test is unreasonable, particularly in light of
18 the fact that the IPL OSB (including the OUCC represented by Mr. Rutter) approved the
19 IPL EM&V Framework (Witness Miller Direct – Attachment EM-1). The EM&V
20 Framework clearly lays out the definitions of each of the benefit cost tests.

21 As IPL Witness Miller and I each describe in our respective settlement rebuttal

1 testimony, several of Mr. Rutter's arguments are simply wrong and reflect flawed
2 calculations. Other of his arguments have been previously rejected by the Commission.

3 If the Settlement Agreement is approved, IPL will be charged with spending
4 approximately \$88¹ million in program operating costs over the three year plan period,
5 resulting in approximately \$237² million in energy savings benefits. The risk free rate of
6 return, Mr. Rutter advocates, is the rate a consumer pays to simply have his or her money
7 safeguarded for a given period of time. It is not the rate one would expect to receive to
8 encourage actions that would lead to achievement of 169% return on an investment. Mr.
9 Rutter's contention that a financial incentive should be tied to the U.S. Treasury Bond is
10 punitive and unreasonable.

11 **Unfair Characterizations**

12 I would also note that while I understand a party to this case may have different positions
13 on issues, the tone of certain remarks in Mr. Rutter's testimony is surprising to me as it
14 seems to attribute ill-motives by the Settling Parties. For example, Mr. Rutter's assertion
15 (settlement, p. 5) that CAC "convinced" IPL to "voluntarily increase its DSM energy
16 savings targets" does not accurately reflect the rigorous settlement process or the Section
17 10 requirements. As I explained in my settlement testimony, the process used by IPL and
18 CAC to negotiate the revised energy savings goals was intensive and the result fairly

¹ Represents the present value of the program operating costs as shown in IPL Witness Miller's Attachment EKM-1SR.

² Note that Witness Rutter's calculations are based on Witness Aliff's Shared Savings Settlement Exhibit KA-2S. Thus, the UCT NPV that Mr. Rutter uses excludes benefit and cost impacts from the IQW and the Business ACLM programs. As shown in Witness Miller's Attachment EKM-1SR, the total UCT benefits of the Settlement Agreement are approximately \$237 million and the net UCT benefits are \$149 million.

1 resolves our disagreement about the IRP modeling and other requirements of the Section
2 10 definition of “energy efficiency goals.” Section 10 requires IPL to file and obtain
3 Commission approval of a DSM Plan to meets the statutory requirements. Thus, the
4 filing is not voluntary; and the energy savings goals are determined by the statutory
5 criteria subject to Commission approval.

6 Similarly, Mr. Rutter (Settlement, p. 18) charges that “IPL held savings in reserve, ready
7 to produce them if necessary and boost the incentive. This behavior should not be
8 rewarded.” Mr. Rutter’s statements are insulting and unfounded. My settlement
9 testimony describes very specifically, the basis for the average annual increase of
10 approximately 30,000 MWH (gross) in the energy savings goals negotiated by the
11 Settling Parties. This increase traces straight to the Company’s IRP, which has been
12 available to the OUCC (and other stakeholders) since November 2016.

13 **Level of Savings and Consistency with the Integrated Resource Plan**

14 The revised energy savings goals reflected in the Settlement Agreement will be
15 challenging to achieve. IPL did not “hold” any savings “in reserve.” Rather, IPL initially
16 had a different view of what the Plan should contain and after discussions with the parties
17 and further analysis; we negotiated a compromise in an attempt to avoid litigating the
18 energy savings goals issues. Discussions with the program implementation vendors
19 validated that these savings levels could be achieved. IPL Witness Miller will
20 demonstrate that the proposed savings levels are consistent with the Company’s IRP
21 (Petitioner’s Exhibit 3SR Q/A 26 & Q/A 27).

1 The 2020 MPS refresh is a reasonable means of resolving a dispute about how the future
2 will unfold and any resulting budget revisions are subject to approval by the
3 Commission. The idea that IPL should be penalized for seeking to avoid a quagmire of
4 litigation is contrary to the public policy that favors settlement of contested issues.

5 Mr. Rutter also argues that “[T]he UCT net benefit as calculated by IPL indicates that IPL
6 has chosen, through its IRP, a demand-side resource over a typical supply side option. As
7 a result, IPL will operate more efficiently and will have reduced its revenue
8 requirement.” (Settlement page 19). This is an admission that customers will benefit
9 from the Settlement Agreement.

10 Finally, at page 5, lines 11-12, Mr. Rutter states “ratepayers simply do benefit”. While I
11 suspect this is an unintentional error, this Freudian slip captures a key takeaway from the
12 Settlement Agreement. IPL’s customers (ratepayers) do benefit from the Settlement
13 Agreement. I recommend the Commission approve the Settlement Agreement in its
14 entirety.

15 **Q9. In his settlement testimony (p. 2), Mr. Rutter contends that the OUCC is fully**
16 **supportive of cost-effective DSM “when the resulting rates are reasonable in the**
17 **context of current rates.” Do you have any response?**

18 A9. Yes, I have a few comments. First, I would clarify that “reasonable in the context of
19 current rates” is not a standard imposed by Section 10. In my view the reasonableness of
20 DSM costs should be assessed against the avoided cost alternative. In other words, we
21 look at what the cost of service would be if the DSM were not implemented and

1 supply-side resources were used to satisfy customer needs for electricity. As discussed
2 by Mr. Miller, the UCT - also referred to as the revenue requirements tests – assesses
3 DSM resource costs in light of what costs would be in the absence of the DSM. Here, the
4 UCT tells us that the proposed DSM Plan as modified by the Settlement Agreement is
5 cost-effective. In fact, the modified plan is more cost-effective than IPL's original filing.
6 (Miller Settlement Testimony at pp 2-3). Put another way, the revenue requirement is less
7 than it otherwise would be if the DSM were not pursued and Mr. Rutter acknowledges
8 this reality (Settlement page 19).

9 Second, IPL has considered the bill impact. Ms. Aliff's settlement testimony shows the
10 overall average monthly impact of the three year plan relative to IPL's current basic rates
11 and charges. She explains that the estimated bill impact, for a typical residential
12 customer, results in a modest average monthly increase of \$0.18 as compared to the
13 original plan as filed. IPL Ex. 4S, at 3; Petitioner's Attachment KA-5S. For
14 transparency, her analysis of the bill impact includes legacy lost revenues and the related
15 utility receipts tax. See also Aliff Settlement Table KA-3S that breaks down the
16 components of the estimated DSM factor.

17 **Q10. In his settlement testimony (p. 2), Mr. Rutter asserts that the "Settlement gives IPL**
18 **99.93% of the UCT net benefit" and thus "ratepayers receive virtually zero benefit"**
19 **from the Settlement Agreement. Do you agree?**

20 A10. No. As described above, Mr. Rutter's calculation of the UCT net benefits is incorrect.
21 The \$149.8 million in UCT benefits Mr. Rutter uses as the basis for this calculation is

1 already net of program operating costs. Despite his testimony to the contrary, Mr.
2 Rutter's analysis double counts program operating costs, significantly inflates his claim
3 that IPL will receive 99.93% of the net benefits and ratepayers receive virtually zero.
4 Witness Miller's rebuttal testimony explains Mr. Rutter's miscalculation in much more
5 detail.

6 **III. ROLLOVER**

7 **Q11. In his settlement testimony (p. 3), Mr. Rutter opposes the rollover of any unspent**
8 **funds from 2017 to the 2018-2020 Plan years because this would effectively rollover**
9 **funds from one "plan" to another "plan". He explains (p. 3) that "[a]nnual budgets**
10 **should not be constructed with an eye towards the possibility that unspent funds will**
11 **be available for future, as-yet-undetermined costs or programs and certainly not in**
12 **an entirely different Plan." Please respond.**

13 **A11.** IPL's original filing provided for the rollover of unspent funds from 2018 to 2019 and
14 from 2019 to 2020. In his direct testimony, Mr. Rutter raised no challenge to this aspect
15 of the proposed DSM Plan. The Settlement Agreement expands the rollover to include
16 any funds that are authorized for DSM in 2017 but remain unspent at the end of the year.
17 At the present time, IPL projects that approximately \$3.2 million may remain unspent in
18 2017. See Allen Settlement, p. 16 and Petitioner's Attachment LHA-1S.

19 Mr. Rutter testimony says the OUCC opposition to this part of the Settlement Agreement
20 is two-fold. First, he argues that annual budgets should not be constructed with an eye
21 towards the possibility of unspent funds. This is not the intention of the Settlement
22 Agreement, nor is it consistent with how IPL projects costs necessary to achieve its

1 energy efficiency goals. Petitioner's Attachments ZE-1 and ZE-1S, and the associated
2 workpapers show the cost projections by program, and are not constructed with line items
3 intended to go unspent. Unspent carry over dollars typically arise for two reasons: (1) a
4 program savings goal was not met, or (2) a program savings goal was met more cost
5 effectively than projected. In either case, it is important to have the flexibility to carry
6 forward unspent funds to pursue additional cost-effective energy efficiency savings.

7 Second, Mr. Rutter argues that unspent funds should not be rolled forward to "an entirely
8 different Plan" Pub. Ex. 1S at 3. I disagree with the suggestion that the Plan for
9 2018-2020 is "entirely different" from the DSM Plan for 2017. While this is IPL's first
10 Section 10 filing, the purpose of the Plan remains the same – achieve cost-effective DSM.
11 In fact, most of the programs are the same programs that IPL has in place today or are
12 logical outgrowths from current programs. The estimated amount of the potential
13 rollover from 2017 (\$3.2 million) is a relatively modest compromise entered into to
14 resolve concerns about the budget. Including it in the spending flexibility provides the
15 OSB more flexibility to respond to market conditions. Importantly, any use of the "2017
16 unspent funds" must comport with the requirements that apply to the OSB exercise of the
17 other rollover or spending flexibility authority – namely the funds must be used to pursue
18 cost-effective energy savings (as verified by the *DSMore* energy efficiency modeling
19 tool) and all OSB members must agree on the use of unspent funds.

20 Among other things, the rollover recognizes that program marketing and participation are
21 not based on a calendar year. Program participation incentive costs incurred in one year
22 can be the result of program marketing and enrollment the year before. Because of the

1 timing of the customer's implementation of its DSM program, the participant incentive
2 may be paid the year after the customers enrolled in the DSM program. One benefit of
3 the rollover provision is that it provides funds to support the payment of lagging
4 participant incentives.

5 Moreover, the rollover of funds from year to year and from Plan to Plan is not new. In its
6 44328 Order approving IPL's 2014 DSM Plan, the Commission granted IPL the authority
7 to rollover any unspent funds from the budget approved in the 43960 Order (from
8 2012/2013 programs). (44328 Order, p. 26). Additionally, in the 44497 Order, the
9 Commission granted IPL "the ability to carry-over any unused amount from the 2015
10 program year to the 2016 program year." (44497 Order, p. 22). Finally, in the 44792
11 Order, the Commission approved the carryover and use in 2017 of any unused 2015/2016
12 program funds (44792 Order, p. 23).

13 **Q12. Mr. Rutter states that the Settlement Agreement prohibits carrying over "any**
14 **unspent funds" from 2018-2020 plan years to subsequent plan years. Is this**
15 **accurate?**

16 A12. No. The Settlement Agreement specifically states "Any unspent funds from the 2017
17 plan year or from a 2018-2020 plan year may be rolled over to subsequent plan years."
18 The Settlement Agreement is silent on what happens with any funds that may remain
19 unspent at the end of the three-year plan period. If any such funds remain, the issue can
20 be addressed in IPL's next DSM Plan filing.

1 **IV. SPENDING FLEXIBILITY**

2 **Q13. In his settlement testimony (pp. 3-4), Mr. Rutter contends that the Settlement**
3 **Agreement language regarding the spending flexibility hamper the OSB's ability to**
4 **react to programs that perform exceptionally or encounter significant cost increases,**
5 **potentially increasing the risk that original programs in the latter group will not meet**
6 **their savings goals. Do you agree?**

7 A13. No. The Settlement does not allocate Spending Flexibility dollars to specific programs.
8 The spending flexibility provisions of the Settlement Agreement are intended to position
9 the IPL OSB to continue to use best efforts to pursue cost-effective energy savings for the
10 benefit of customers as market conditions warrant. The addition of the 2017 rollover to
11 the spending flexibility and the 2020 MPS refresh increases the IPL OSB's flexibility to
12 react to market conditions while providing reasonable limitations to safeguard the total
13 cost impact of the agreed DSM Plan. The intent of the Settlement Agreement is to project
14 cost-effective savings that may be possible if all Spending Flex dollars are utilized.

15 **Q14. In his settlement testimony (p. 4), Mr. Rutter also contends that "10% flexible**
16 **spending amounts should never be rolled over from year to year." And "IPL did not**
17 **utilize its flexible spending in either 2015 or 2016." Do you agree?**

18 A14. No. IPL has historically included unspent spending flexibility amounts in its carryover
19 funds with the approval of the IPL OSB. The Commission's Order in Cause No. 44497
20 allows for "approved budget amounts and spending flexibility, and with the ability to
21 carry-over any unused amounts from the 2015 program year to the 2016 program year".
22 (44497 Order, p. 22). As shown in Petitioner's Attachment LHA-1SR (Updated 2016

Portfolio Summary reflecting flexibility spending), the IPL OSB approved the rollover of unspent spending flexibility from 2015 to fund 2016 programs. In Petitioner's Attachment LHA-2SR, I also attached the minutes from the November 2016 OSB meeting where this proposal was approved. The 2015/2016 approved budgets (including spending flexibility) were treated as a two-year total spend. The 44497 Order also indicates the program budgets and spending flexibility amounts as a two-year total (Order, p. 21). IPL used \$2.6 million of the authorized \$4.4 million spending flexibility in program years 2015 and 2016.

V. TRANSPARENCY

Q15. In his Settlement testimony (pp. 4-5), Mr. Rutter contends that the Settlement Agreement “lacks transparency” and this “lack of transparency cloaks customer’s true cost” of the Settlement Agreement. Please respond.

A15. I disagree with these claims. The Settling Parties have not hidden the program operating costs, lost revenues or financial incentives. In fact, the testimony in support of the proposed DSM Plan includes the amount of “legacy lost revenues” even though such lost revenues are not at issue in the proposed plan. See IPL Witness Aliff Direct, Attachments KA-4 and KA-5; Witness Aliff Settlement, Attachments KA-4S and KA-5S. IPL’s discussion of the DSM Plan costs and benefits follows the standard cost-benefit tests. While the OUCC may prefer to assess the costs in a different and non-standard manner, the fact remains that the costs are fully disclosed in IPL’s filing, and are applied using standard practice definitions from the EM&V Framework as approved by the IPL OSB.

1 **Q16. In his Settlement testimony (p. 5) Mr. Rutter states that the “true cost” of the DSM**
2 **Plan as modified by the Settlement Agreement is \$149,695,626. Do you have any**
3 **additional comments on this amount?**

4 A16. The amount identified by Mr. Rutter includes legacy lost revenues, which as discussed
5 above are not part of the agreed DSM Plan, but were provided for transparency. As
6 shown in IPL Witness Elliot's settlement testimony (Table ZE-4S (3)), total program
7 costs for the agreed three-year DSM Plan are approximately \$127 million.

8 **Q17. In his Settlement testimony (p. 5), Mr. Rutter suggests that the Settlement Agreement**
9 **is unreasonable because “any decrease in reduced incentive percentages is offset**
10 **against the increased incentives from additional savings.” Do you agree?**

11 A17. No. IPL is agreeing to do significantly more energy efficiency that will be more difficult
12 to achieve. If we achieve the goals as modified by the Settlement Agreement, we have
13 agreed to receive a reduced share of the savings benefits. The estimated financial
14 incentive under the Settlement Agreement is almost \$6 million less, to the benefit of the
15 customer, than the originally proposed financial incentive. Conversely, under the
16 Settlement Agreement, the UCT net benefits increased by approximately \$31 million and
17 cost per kWh over the life of the savings improves from \$0.018/kWh to \$0.017/kWh (as
18 shown in Table 1). In summary, the Settlement Agreement provides the customers with
19 significantly more benefits and IPL with a lower financial incentive opportunity than
20 originally filed.

TABLE 1

	As filed	Petitioner's Attachment KA-2S - Settlement Agreement excluding IQW and Business DR	OUC financial incentive (T-Bill)
NPV of UCT net benefits	\$ 118,339,026	\$ 149,795,759	\$ 149,795,759
IPL Share of the NPV of benefits	15.00%	8.00%	NA
IPL Share of customer supplied funds	NA	NA	1.23%
Customer Share	\$ 100,588,172	\$ 137,812,098	\$ 148,667,200
IPL Share	\$ 17,750,854	\$ 11,983,661	\$ 1,128,559
Reduction in IPL financial incentive	\$ -	\$ (5,767,193)	\$ (16,622,295)
Increase in Net Benefits	\$ -	\$ 31,456,733	\$ 31,456,733
Lifetime cost of savings (\$/ kWh)	\$0.018	\$0.017	\$0.017

VI. COST AND BENEFIT ANALYSIS

Q18. In his discussion of Section 10(j)(2) in his direct testimony (pp. 3-4), Mr. Rutter indicates that customers do not have the opportunity to employ their own benefit-cost analysis in their decision to pay the DSM rider. Please respond.

A18. Section 10 (j)(2) is not addressed to policy. All that Section 10(j)(2) requires is that the petitioning utility submit, and for the Commission to consider, a cost and benefit analysis “of the plan”, which IPL has done. Mr. Rutter’s comments are not addressed to the cost and benefit analysis of the DSM Plan submitted by the Settling Parties (or the plan as originally filed by IPL). Rather, his comments are addressed to some action a customer might consider taking.

Q19. Please respond to Mr. Rutter’s contention (Direct, p. 3) that customers do not have the “option” on whether or not to “pay the DSM rider”. In his Settlement opposition

1 testimony (p. 5), he states that under the Settlement Agreement, IPL “is sharing in
2 0% of the costs”. Please respond.

3 A19. Mr. Rutter’s statement that customers do not have the “option” on whether or not to “pay
4 the DSM rider” appears to challenge the legislative policy underlying Section 10. While
5 we are not here to debate the Section 10 policy directives, the cost recovery provided in
6 Section 10 reasonably recognizes that cost-effective DSM portfolios benefit customers
7 generally. Section 10 also provides for timely cost recovery of all program costs if the
8 Commission approves the DSM Plan. It is reasonable that customer rates for retail
9 electric service reflect the Commission approved cost of utility service provided by DSM
10 programs. In addition to IPL’s DSM programs providing a positive net benefit to all
11 customers, customers also have the opportunity to participate in IPL’s DSM programs
12 which yields bill savings as well. Customers who choose to participate in these programs
13 should make a rational decision based on the economics of the energy efficiency
14 investments from their point of view (this is measured by the Participant Cost Test).
15 Furthermore, Mr. Rutter’s contention that IPL is not “sharing in the costs” is incorrect.
16 The Settlement Agreement reflects that IPL has agreed to significant concessions on cost
17 recovery. See Allen Settlement Testimony Q/A 14 (discussing \$83 million in cost
18 recovery concessions compared to IPL’s original plan).

19 **Q20. Please respond to Mr. Rutter’s concern that IPL will recover DSM program costs**
20 **regardless of program cost-effectiveness. (Rutter Direct p. 3).**

21 A20. I disagree with Mr. Rutter’s suggestion that cost-effectiveness is disregarded by IPL or
22 the Commission. Section 10 (j)(2) specifically addresses cost-effectiveness, which

1 again, IPL has demonstrated and the Commission will take into consideration in this case.
2 IPL has also submitted settlement testimony which shows the Settlement Agreement
3 improves the cost-effectiveness of the original plan. (Miller Settlement testimony at pp.
4 2-3).

5 Certainly at the portfolio level, IPL's DSM Plans, including the current proposed DSM
6 Plan, have been cost-effective. IPL has consistently offered DSM program portfolios
7 that have a positive benefit and cost as determined by the Total Resource Cost Test
8 ("TRC").³ While IPL considers all the tests, the TRC test has long been the primary
9 cost-effectiveness threshold that IPL considers for approval of DSM programs. When
10 IPL implements a portfolio of programs, we work to achieve cost-effective energy
11 savings. If we are not able to deliver cost-effective savings, the shared savings financial
12 incentive is not earned. IPL's two most recently completed program year evaluations (as
13 filed with the Commission) indicate that IPL programs have performed well with a
14 benefit-cost ratio for the portfolio, as measured by the TRC and UCT, as shown in Table
15 2 below. It is our expectation that IPL DSM programs throughout the term of this
16 agreement will continue to be cost-effective.⁴

³ The Total Resource Cost test is an indication of whether the total cost of energy in the utility's service territory will decrease.

⁴ IPL 2015 EM&V Report as filed in Cause No. 44497, October 14, 2016, p. 262; and IPL 2016 EM&V Report as filed in Cause No. 44497, June 30, 2017, p. 352.

Table 2
Cost Effectiveness IPL DSM Portfolio

	2015 Actual	2016 Actual	2017 Forecast	2018-2020 As Filed	2018-2020 As Settled
TRC	1.96	2.97	1.38	2.24	2.38
UCT	2.58	3.67	1.97	2.57	2.70

Q21. Do you agree with Mr. Rutter's argument that the "costs exceed the benefits" in each of the DSM plan years (Rutter Direct, p. 4) from the customer's point of view?

A21. No. Mr. Rutter states that the cost for DSM is on average between \$0.01 to \$0.02 per kWh saved over the life of the measure.⁵ This assertion seems to acknowledge the reasonableness of the DSM program operating costs, which remain low under the Settlement Agreement.

Mr. Rutter's contention that costs exceed the benefits is based on a flawed comparison of first year program costs to only the first year customer bill savings that he develops in Attachment ETR-2.

Q22. Please explain.

A22. In the first column of the ETR-2 Table (page 1 of 2), Mr. Rutter indicates that an average customer that saves 1.31% of their energy use will realize a benefit of \$1.28 at a cost of \$4.32. This analysis is wrong, in that it does not recognize the fact that the customer would only pay the \$4.32 one time while continuing to see the \$1.28 benefit for many future periods. Mr. Rutter's analysis is also incorrect in that it includes legacy lost

⁵ Rutter Direct Testimony p. 4.

revenues, implying that it is appropriate to include these in any cost and benefit analysis. Including legacy lost revenues is not appropriate to calculating the cost of operating DSM programs.

While I also disagree with Mr. Rutter's methodology (as discussed below), for discussion's sake I have corrected his breakeven analysis for a participating customer at Petitioner's Attachment LHA-3SR. This analysis compares all the bill savings, which continue for over nine (9) years,⁶ to the DSM tracker costs borne by the customer over the same period. In this analysis, as shown in Table 3 below the customer with 1.31% in bill savings has a lifetime benefit of \$137.80 compared to a cost of \$70.96 for a benefit/cost ratio of 1.94.

TABLE 3

Witness Rutter B/C Test (ETR-2) Corrected			
	Benefit	Cost	Ratio
Witness Rutter Calculation (per month)	\$ 1.28	\$ 4.32	0.30
Corrected to reflect lifetime savings	\$ 137.80	\$ 70.96	1.94

In summary, Mr. Rutter's analysis is flawed in that it includes costs that are not relevant (legacy lost revenues⁷) and it also dismisses the fact that DSM resources are relatively long lived and provide benefits for both participating and non-participating customers well into the future.

⁶ Nine (9) years is the approximate average life of the IPL DSM measures as proposed in this plan.

⁷ The distinction is important. The two "buckets" of lost revenue are legacy lost revenue (that result from prior DSM program approvals) and incremental lost revenue (that will result from DSM programs proposed here in).

1 **Q23. Do you have any other thoughts on Mr. Rutter's observations on the customer's cost**
2 **and benefit perspective of the DSM Plan?**

3 A23. Yes. I disagree with the conclusion drawn by Mr. Rutter that a customer would require
4 first year savings that exceed 4% of the overall kWh usage (Rutter Direct p. 5) to invest in
5 energy efficiency. I first need to note that, in spite of the label in his table to the contrary,
6 the average tracker cost that Mr. Rutter develops in Attachment ETR-2 of \$0.438 per
7 kWh includes legacy lost revenues.⁸ As I indicate elsewhere in testimony, it is
8 inappropriate to include legacy lost revenues in representations of the proposed program
9 operating costs or the costs of the proposed DSM Plan.

10 With respect to the idea that a customer needs to realize a 4% reduction in energy usage to
11 justify their investment in energy efficiency, a rational customer would not only consider
12 the first year benefits of an investment in energy efficiency investment but they would
13 also consider the lifetime energy savings. My Q/A 22 (and Petitioner's Attachment
14 LHA-3SR) discussed above illustrates that a customer is significantly better off with
15 even a 1.31% bill savings refuting Mr. Rutter's conclusion that a customer requires a 4%
16 bill savings to be better off with this DSM plan. It should also be noted that the Witness
17 Rutter's analysis (comparing a customer's payment of the rider to the bill savings)
18 although implied as such, is not the Participant Cost Test (PCT).⁹

⁸ The correct "tracker" cost per kWh in ETR-2, when adjusted to remove legacy lost revenues is \$0.30 per kWh – see workpaper LHA-1SR. If cost per kWh calculations include legacy lost revenues in the numerator, to be more consistent, the calculation should also reflect kWh savings from prior program delivery in the denominator.

⁹ The PCT is a simple payback calculation that reflects bill savings versus costs as those incurred by the customer to take the EE action in question (i.e. out of pocket costs for a measure after utility incentives).

1 **Q24. Mr. Rutter states that IPL's cost and benefit analysis does not include an analysis of**
2 **the potential additional savings to be derived from the prudent exercise of spending**
3 **flexibility or additional savings in 2020 that might be pursued under Section 3(f)(iii)**
4 **and (iv) of the Settlement Agreement. Is this a reason to reject the Settlement**
5 **Agreement?**

6 A24. No. The Settlement Agreement requires any additional energy savings to be
7 cost-effective. IPL measures cost-effectiveness using the *DSMore* energy efficiency
8 modeling tool, and will provide updated cost-effectiveness analysis to the extent IPL
9 requests authorization of spending flexibility from the IPL OSB. Additionally, the
10 Settlement Agreement requires any budget modifications for 2020 as a result of the
11 updated MPS to be approved by the Commission. This issue is further discussed in IPL
12 Witness Miller's settlement rebuttal testimony.

13 **VII. COST PER KWH SAVED**

14 **Q25. Do you have any overall comments regarding Mr. Rutter's analysis of the costs per**
15 **kWh saved of the DSM Plan?**

16 A25. Yes. I disagree with the contention in Mr. Rutter's settlement testimony (pp. 4-5) that
17 IPL's presentation of the cost of the DSM Programs has clouded the true cost of the DSM
18 Plan. We have not ignored the lost revenue and financial incentive costs; we have just
19 separately identified them from the program operating cost component. Section 10
20 recognizes that there are three cost components of DSM/EE programs – namely program
21 operating costs, lost revenues, and financial incentives. It is reasonable to present each of
22 these costs separately.

1 The Commission has previously recognized that “program operating costs are a separate
2 and distinct cost from lost revenues”. I&M, Cause No. 43827 DSM-5, Order on
3 Reconsideration at 1-2 (August 31, 2016). In this I&M DSM case, the Commission also
4 recognized that “Shared Savings is a sharing of benefits between customers and I&M,
5 when I&M successfully facilitates those customer benefits.” This logic applies here as
6 well. As such, neither the net lost revenues nor the shared savings should be included
7 when calculating the annual cost of operating the DSM/EE programs.

8 **Q26. Mr. Rutter states that “program costs influence program participation. Higher costs
9 can cause reduced participation, and in turn, can influence the amount of energy
10 actually saved” (Direct, p. 6). Do you agree?**

11 A26. No. I would expect higher program costs and thus higher customer bills likely have the
12 opposite effect. Higher bills for electricity send a price signal that encourages customers
13 to take advantage of the DSM program offerings to reduce their energy use and
14 potentially result in bill savings.

15 However, DSM program costs and the resulting customer rate impacts were an important
16 consideration for IPL during the formulation of the DSM Plan and in the negotiation of
17 the Settlement Agreement. It bears repeating that the DSM Plan program portfolio is
18 cost-effective under both the TRC test,¹⁰ and the UCT and the terms of the Settlement
19 Agreement actually improve the DSM Plan portfolio cost-effectiveness as discussed in

¹⁰ As noted by Witness Miller in his testimony, IPL looks to offer programs that pass both the TRC and the UCT test (Q/A 8).

1 the Settlement testimony of IPL Witness Miller.¹¹ A positive result for the TRC test
2 means that, on average, customers are better off economically with the DSM resources
3 than they otherwise would be, resulting in lower bills.

4 **Q27. Mr. Rutter indicates that the average cost to ratepayers is \$0.34 per kWh saved.**
5 **(Rutter Direct at 6; Attachment ETR-3).¹² Do you agree with this representation?**

6 A27. No. Mr. Rutter's calculation differs from IPL's calculation because he incorrectly
7 includes net lost revenues and shared savings in the analysis. As discussed above, IPL's
8 analysis separately identifies these cost components because they are not program
9 operating costs.

10 In the plan as originally filed, the DSM Plan program costs are approximately \$0.21 per
11 kWh and Total DSM Plan costs are \$0.30 per kWh for program costs when the relevant
12 lost revenues and forecast shared savings are considered (not the \$0.34 per kWh saved as
13 indicated by Mr. Rutter).

14 In the Settlement Agreement, the DSM Plan Operating Costs are less than \$0.20 per kWh
15 and the Total DSM Plan costs are approximately \$0.27 per kWh when the relevant lost
16 revenues and forecast shared savings are considered.

17 In his Attachment ETR-3, Mr. Rutter inappropriately includes "legacy lost revenues" in
18 this calculation. There are no legacy lost revenues resulting from the 2018-2020 DSM

¹¹ Settlement Testimony of IPL Witness Miller, Q/A 8, p. 2.

¹² Note that there appears to be a typo in the Direct Testimony of Witness Rutter on page 5 of 25 on line 20. The "average cost to ratepayers", as calculated by Mr. Rutter in Attachment ETR-1 is \$0.34 per kWh not the \$0.3 as indicated in the testimony.

1 Plan as originally filed or as modified by the Settlement Agreement.

2 In Cause No. 44645, the Commission evaluated the impact of the proposed DSM plan
3 based on short-term bill impacts on customers and various cost-effectiveness tests
4 presented by Vectren. 44645 Order at 23; Vectren Witness Stevie Direct at 15-17. The
5 Commission did not consider Vectren's legacy lost revenues in its determination of this
6 issue. Here, IPL included the legacy lost revenue information for transparency in terms
7 of the customer bill impact, but the legacy lost revenues are related to DSM programs
8 delivered prior to 2018, and results from approvals received in prior proceedings.¹³ By
9 including legacy lost revenues, Mr. Rutter overstates the impact of the DSM plan on
10 customers and ignores legacy benefits provided by earlier program delivery.

11 **VIII. REASONABLE LOST REVENUES**

12 **Q28. In his Settlement testimony (p. 5), Mr. Rutter contends that IPL will “earn millions of**
13 **dollars in additional lost revenues” if the Settlement Agreement is approved. Please**
14 **respond.**

15 A28. I disagree with the suggestion that the Settlement Agreement provides additional
16 earnings from lost revenues. The cap on lost revenue recovery agreed to in the
17 Settlement Agreement reduces the estimated lifetime lost revenue recovery by
18 approximately \$40 million as compared to the amount requested in IPL's Direct
19 Testimony. Pet. Ex. 1S, at 8. Moreover, lost revenues reflect certain costs that the

¹³ The recovery of lost revenues related to the 2015 and 2016 DSM program delivery (“legacy lost revenues”) was approved by the Commission Order in Cause No. 44497, dated December 17, 2014. Lost revenues related to the 2017 DSM program delivery were approved by the Commission Order in Cause No 44792, dated December 28, 2016.

1 Commission has approved for recovery through rates but is “lost” due to IPL’s
2 implementation of the DSM programs. If IPL did not implement the DSM Programs, this
3 Commission approved cost recovery would not be “lost.” Thus, the Settlement
4 Agreement merely recognizes the foregone cost recovery and does not provide IPL with
5 the opportunity for something “additional” in terms of lost revenues.

6 **Q29. Mr. Rutter states that the Commission audited, vetted, reviewed and determined an**
7 **embedded level of fixed costs in IPL’s most recent base rate case, Cause No. 44576.**
8 **Please clarify how IPL’s fixed costs were treated in the residential and small**
9 **commercial rate design approved in Cause No. 44576.**

10 A29. The rate design underlying the basic rates approved in Cause No. 44576 (the Company’s
11 last basic rates case) recovered approximately 75 percent of residential fixed costs in the
12 volumetric energy charge, and approximately 81 percent of the small commercial fixed
13 costs in the volumetric energy charge. Gaske Rebuttal, at 29, 53-54. March 16, 2016
14 Order in Cause No. 44576 at 70. IPL’s calculation of lost revenues assumes that all lost
15 margins will occur in the tail block of the volumetric energy charge. This conservative
16 assumption benefits customers because it is likely that some of the lost margins will also
17 occur in the first and second blocks of the rate structure where the lost margin would be
18 even greater than the amount estimated in IPL’s calculation of lost revenues. See also
19 Gaske rebuttal in Cause No. 44576 at 54 (stating 32 percent of the RS customer bills have
20 all of their usage in the higher first block of the residential energy charge, meaning that
21 any DSM margins lost from these customers would be underestimated by IPL’s method
22 of assuming that all lost margins are associated with the tail-block rate).

1 **Q30. Mr. Rutter's contends the proposed lost revenue recovery is unreasonable (Direct, p.**
2 **13). Do you agree?**

3 A30. No. OUCC Witness Rutter's discussion of lost revenues in his direct testimony (p. 13)
4 suggests that the lost revenues IPL is seeking to recover extends beyond what is
5 permitted under Section 10. I wish to clarify that this is not so. The lost revenues that
6 IPL is seeking to recover are made up of only the fixed costs incurred to provide electric
7 service to our customers that is embedded in our Commission-approved rates and lost as
8 a result of the EE program implementation. These fixed costs were determined by the
9 cost of service study in the last rate case. There are no variable costs included in the lost
10 revenue calculations. IPL is not seeking to recover through the DSM Rider increases in
11 IPL's fixed costs above the level embedded in our basic rates approved by the
12 Commission in Cause No. 44576. Additionally, IPL is not seeking to recover fixed costs
13 reflected in the fixed monthly customer charges approved in Cause No. 44576.

14 IPL's Commission-approved rates are designed to recover a significant percentage of the
15 Company's fixed costs through the volumetric energy charge. When IPL's customers
16 reduce their energy usage as a result of the EE programs, IPL's energy charges are no
17 longer able to recover customers' contribution to fixed costs they would have absent the
18 DSM plan. Thus, while the Commission approved level of fixed costs embedded in the
19 Company's basic rates does not increase or decrease with the amount of energy sold, the
20 recovery of these fixed costs does change based on the amount of energy sold.

21 Lost revenue recovery provides IPL with the opportunity to get back to a place where we
22 would be absent customers participating in energy efficiency programs and thereby using

1 less electricity, it does not increase the Company's earnings as Witness Rutter claims.
2 Below, I provide additional arguments to refute various contentions made by Mr. Rutter
3 regarding the lost revenues that IPL should be allowed to recover as a result of delivering
4 energy efficiency to our customers.

5 **Q31. Mr. Rutter (Direct, p. 7) indicates that the Section 10 definition of lost revenues**
6 **“generously” allows the utility to recover fixed costs for unrealized sales. Do you**
7 **agree with this characterization?**

8 A31. No. First of all, I dispute the implication that the Section 10 language is “generous”.
9 While I would not try to divine the intention of the legislature in the development of this
10 language, I would presume that their intention was one of fairness. Section 10, directs
11 utilities as a matter of public policy to pursue appropriate amounts of energy efficiency as
12 part of a balanced resource portfolio to serve our customers. When IPL offers DSM
13 programs, that activity reduces the participating customer's energy usage and this in turn
14 results in fewer sales of electricity. This prevents IPL from recovering certain fixed costs
15 embedded in its Commission approved volumetric rates.

16 The ability to recover fixed costs for unrealized sales – as provided for by Section 10 –
17 simply and justly allows the utility to get back to where they otherwise would be in the
18 absence of EE programs.

19 **Q32. Mr. Rutter (Direct, p. 7) also indicates that “the Commission should not continue to**
20 **allow recovery of fixed costs associated with DSM energy saved, as that is**

1 **unreasonable and seriously imbalances the relationship between the ratepayer**
2 **interest and the investor interest.” Do you agree with this contention?**

3 A32. No. I question whether Mr. Rutter's position is based on a flawed understanding of what
4 fixed costs we are addressing here and how those fixed costs are reflected in IPL's
5 Commission-approved rate design. As explained above, the Commission has authorized
6 IPL to recover a significant level of fixed costs through our Commission approved
7 volumetric rates. When we do not make sales because of the EE programs offered
8 pursuant to Section 10 requirements, the Company is not able to recover these fixed
9 costs. Cost-effective DSM programs remain an effective means to meet the utility's
10 future energy and capacity needs – but that does not mean that lost revenue recovery
11 associated with past capital investments can be ignored and not recovered by the utility.
12 This recovery of fixed costs for prior investments is the whole rationale for lost revenue
13 recovery which is meant to eliminate the disincentive utilities would otherwise have to
14 promote DSM programs.

15 **Q33. In his direct and settlement testimony Mr. Rutter suggests that lost revenue recovery**
16 **somehow runs afoul of the concept of “just and reasonable rates”. Pub. Ex, 1 at 17;**
17 **Pub. Ex. 1S, at 8. Do you agree?**

18 A33. No. Our state legislature establishes energy policy in Indiana. As recognized in the cost
19 recovery provisions of Section 10, the cost of complying with the State's policy must
20 necessarily be recognized in rates. Doing so is consistent with the concept of just and
21 reasonable rates because such rates must necessarily recognize the cost of providing
22 service. Furthermore, just and reasonable rates are exactly what lost revenue recovery

1 provides for. Lost revenues represent fixed costs that were found to be just and
2 reasonable in prior rate cases that becomes unrecoverable through the Company's
3 Commission-approved basic rates due to the success of IPL's DSM programs.

4 The Commission has made the point clear in prior proceedings that lost revenue recovery
5 by utilities is reasonable, including the following excerpt from the Duke Energy Indiana
6 Order in Cause No. 43955 – DSM 3 (March 9, 2016 at page 48):

7 This Commission has been clear that “the recovery of lost revenues is a tool
8 to assist in removing the disincentive a utility may have in promoting DSM
9 in its service territory.” See *In re Petition of NIPSCO*, Cause No. 44496
10 (November 12, 2014); see also, 170 IAC 4-8-6 (c) and *In re Petition of*
11 *Southern Ind. Gas & Elec. Co.*, Cause No. 43938, at pp. 40-41 (IURC
12 August 31, 2011).

13
14 In the same Order, the Commission stated that they had also repeatedly explained that the
15 purpose of lost revenue recovery is to return the utility to the position it would have been
16 absent implementation of DSM:

17 We have also repeatedly explained that because the purpose of lost revenue
18 recovery is to return the utility to the position it would have been in absent
19 implementation of DSM, simply eliminating lost revenue recovery when
20 sales are higher than the levels used to develop a utility's current base rates
21 would be contrary to this purpose. See 44496 Order at pp. 21-22 and 43938
22 Order at p. 41.

23
24 Order in Cause No. 43955 DSM-3, Page 48. Mr. Rutter is simply bringing an old
25 argument to this case that the Commission has previously rejected in prior cases. There is
26 no legitimate reason for the Commission to reach a different conclusion on this issue in
27 this case.

1 **Q34. Mr. Rutter (Direct, p. 8; Settlement, p. 8) states that “[i]n order to return the utility**
2 **to the position it would have been absent implementation of a DSM measure, the**
3 **utility should be entitled to recover the “lost margin” associated with the lost sale, not**
4 **the fixed costs associated with that sale.” Do you agree?**

5 A34. I do not agree that lost margin recovery as provided in the statute excludes foregone fixed
6 costs. The Section 10 definition of lost revenues includes recovery of the foregone fixed
7 cost recovery.¹⁴ This appears to be another example of the OUCC challenging the state
8 policy enacted in Section 10. The inclusion of foregone fixed cost recovery is reasonable
9 and necessary to “return the utility to the position it would have been in absent
10 implementation of a DSM measure”. In other words, to allow the recovery of the “lost
11 margin”, one must necessarily allow the recovery of the foregone fixed costs.

12 **Q35. Mr. Rutter (Settlement, p. 9) states that if “lost revenue recovery provides the utility**
13 **with anything more than the return opportunity, or margin lost, this creates a bias in**
14 **favor of DSM over what would be experienced by the utility if it were to build, own**
15 **and operating a supply-side resource.” See also Rutter Direct, p. 9. Do you agree?**

16 A35. No. As I stated previously, the purpose of DSM/EE programs is to reduce customers’
17 consumption of electricity. This in turn serves to reduce IPL’s electricity sales. The
18 reduction in electricity sales negatively impacts IPL’s opportunity to recover the fixed

¹⁴ IC 8-1-8.5-10 (e): “For purposes of this section, ‘lost revenues’ means the difference, if any, between: (1) revenues lost; and (2) the variable operating and maintenance costs saved by an electricity supplier as a result of implementing energy efficiency programs.”

1 cost of service previously approved by the Commission for ratemaking purposes.¹⁵ By
2 comparison, if the Commission approves a supply-side investment in a new generating
3 unit, the return of and on that investment through rates does not cause the Company to
4 lose ratemaking recognition of other fixed costs of service, which includes return on
5 investments made. Additionally, lost revenues are not equivalent to a “return on” the
6 new investment. Rather lost revenues reflect ratemaking recognition of “other” fixed
7 cost of service which includes return on. That is why, all three components of cost
8 recovery (program operating costs, lost revenues and financial incentives) are necessary
9 for utility offered DSM programs.

10 **Q36. Mr. Rutter also states that IPL has no money at risk in the offering of DSM**
11 **programs. (Settlement, at 9-10; Direct at 9). Do you agree?**

12 A36. No. As discussed by Mr. Miller, the OUCC's proposal to cap DSM program cost
13 recovery at 50% of the OUCC's modified UCT test would disallow recovery of
14 substantial program operating costs and provide zero recovery of lost revenues and
15 financial incentives.

16 Additionally, I do not agree that implementation of DSM programs is without risk. The
17 programs do not run themselves. If IPL acts imprudently in the implementation of the
18 DSM programs, cost recovery will be challenged. Additionally, there is a financial risk
19 involved as the proposed shared savings depends on the DSM programs being delivered

¹⁵ These “fixed costs” which are discussed throughout my testimony, reflect the “return of” fixed costs and “return on” investments that would otherwise be collected through IPL's volumetric rates but for the customer adoption of energy efficiency.

1 cost-effectively. Higher program costs or lower program savings will reduce the
2 financial incentive. There is also an evaluation risk – IPL only recovers the lost revenues
3 associated with the net energy sales lost. All DSM programs are subject to an
4 independent third party evaluation which will determine factors such as free-ridership
5 and the in service rate of measures. To the extent that these evaluate at an amount less
6 than forecast by IPL, lost revenues and shared savings will be less than expected.

7 **Q37. Mr. Rutter states (Direct, p. 8) that the OUCC does not support recovery of the fixed**
8 **cost portion of lost revenues through a tracker mechanism. In his settlement**
9 **testimony, he adds that “[i]t is never appropriate to recover fixed costs associated**
10 **with DSM sales when the utility’s sales exceed approved and embedded test year**
11 **sales or to pay for escalating costs that are not approved and embedded in rates.”**
12 **Pub. Ex. 1S, at 10. Please respond.**

13 A37. I have already addressed why recovery of foregone fixed costs is appropriate. With
14 regard to the level of IPL retail sales, these can fluctuate due to numerous factors largely
15 outside the control of the company, including weather changes, broader macroeconomic
16 drivers, and changes in business cycles. The reasonableness of lost revenue recovery is
17 not relevant to these sales fluctuations.

18 The OUCC position appears focused on challenging the statute, not implementing it.
19 Section 10 provides that if the Commission approves the plan, the Commission “shall”
20 allow the electricity supplier to recover “all associated program costs on a timely basis
21 through a period rate adjustment mechanism.” Section 10(k). As defined in Sections

10(g) and 10(o), “program costs” include reasonable lost revenues. Lost revenue recovery as authorized by Indiana statute and Commission rules (170 IAC 4-8-6), is designed to compensate the utility for the reduction in the recovery of fixed costs through volumetric rates that directly result from the installation of energy efficiency measures by our customers attributable to the Company’s energy efficiency program offerings.

Again, there are no costs other than foregone fixed costs, in the IPL proposal for lost revenue recovery. Additionally, as stated in my settlement testimony (p. 7) and shown in Table 4 below, the Company’s retail sales in the 12-month period ending June, 2017 is 1.5% lower than the test year level of sales used to establish rates in Cause No. 44576.

Table 4

12 Months Periods Test Year and Beyond	Rate Case Test Year Sales (GWh)	Difference to Prior Year (GWh)	Cumulative Difference (GWh)	Cumulative % Difference
Test Year Sales (July 2013-June 2014)	13,710			
July, 2014-June 2015	13,659	(51)	(51)	-0.37%
July, 2015-June 2016	13,579	(80)	(131)	-0.95%
July, 2016-June 2017	13,502	(77)	(208)	-1.51%

As stated in my settlement testimony (Q/A 12), future sales are expected to remain flat, to a great extent reflecting how successful IPL’s DSM programs have been and are expected to be in the future.

Therefore, I contend that the OUCC argument about the suitability of tracker recovery of

1 DSM costs is a moot issue because 1) the General Assembly has already decided that
2 timely cost recovery through a rate adjustment mechanism shall be allowed; 2) IPL has
3 had a recent case where fixed costs were vetted and plans to file another general rate case
4 in the near future; and 3) the factual predicate for the OUCC argument – namely
5 increased sales – does not exist in this case.

6 **Q38. Do you have any other comments on Mr. Rutter's contention regarding the use of a**
7 **rate adjustment mechanism to recognize the cost of DSM in the ratemaking process?**

8 A38. I would add that the April 27, 2011 Commission decision in Cause No. 43839 cited in Mr.
9 Rutter's settlement testimony (p. 10) was entered prior to the enactment of Section 10 and
10 therefore could not have been addressed to this statutory enactment. Additionally, DSM
11 operating costs and lost revenues are well suited to a tracker because these costs are
12 variable, material, and are dependent on market conditions. Because the financial
13 incentive is dependent on energy savings being cost-effective, the rate adjustment
14 mechanism does not dis-incent the Company from managing the operating costs of the
15 programs.

16 **Q39. Witness Rutter (Direct, pp. 12-13) states that "IPL's proposed recovery of lost**
17 **revenues, rather than recovery of lost operating margin or profit is unreasonable and**
18 **should be denied". Please respond.**

19 A39. This is a red herring. While it is not exactly clear what point Mr. Rutter is trying to make
20 since lost revenues are a reflection of "lost operating margin or profit," IPL lost revenues
21 are not unreasonable and recovery should be allowed as provided in the Settlement

1 Agreement. The issue of whether the tracking of lost revenue should be allowed was
2 decided by the enactment of Section 10. Section 10(o) specifically allows for the
3 recovery of reasonable lost revenues (and financial incentives) associated with an
4 approved plan and Section 10(k) provides that such recovery shall occur on a timely basis
5 through a periodic rate adjustment mechanism.

6 IPL's DSM lost revenue calculation represents only the contribution to margin that is lost
7 when a kWh is not sold and excludes variable operating costs. While Section 10(o) does
8 include a reasonableness consideration, it seems clear that IPL's lost revenues have been,
9 and are forecast to continue to be, reasonable given significant concessions in the
10 Settlement Agreement on lost revenue recovery.

11 **Q40. Is there any merit to Mr. Rutter's calculation of IPL's legacy lost revenues as a**
12 **function of IPL's Net Operating Income (Direct p. 13)?**

13 A40. No. His calculation is incorrect, misleading and should be ignored. The recovery of lost
14 revenues cannot be equated to a top line revenue stream which is reduced by fixed and
15 variable operating expenses to get to a bottom line "profit" or Net Operating Income
16 ("NOI") as Mr. Rutter suggests. Utility lost revenues (as it is defined in Section 10)
17 reflect only the recovery of fixed costs (which does include some dollars which
18 contribute to IPL's NOI). The entire lost revenue amount requested is necessary to
19 recover fixed costs which allow IPL to attempt to get back to our Commission approved
20 revenue requirement. To the best of my knowledge, the approach used by Mr. Rutter has
21 never been used by the Commission to determine reasonable lost revenue recovery. If

1 this approach were accepted, it would result in IPL only recovering about 10% of the lost
2 revenues that traditionally has been allowed. And the disallowance of lost revenue
3 recovery would be based on a different construct not reflected in Section 10.

4 **IX. OUCC PROPOSED CAP ON PROGRAM COST RECOVERY**

5 **Q41. Mr. Rutter recommends program cost recovery be capped at 50% of the UCT net**
6 **benefit. Settlement, at 13, 24; Direct at 15. Do you agree?**

7 A41. No. As explained by IPL Witness Miller (Q/A 15), Mr. Rutter's recommendation, if
8 adopted, would result in the disallowance of substantial program operating costs and
9 allow no recovery of lost revenues and no financial incentive. As also explained by Mr.
10 Miller, the OUCC has distorted the "UCT" test. In its true form, the UCT test results in
11 approximately \$149 million¹⁶ in net benefits. I would add that this OUCC
12 recommendation is another example of the OUCC challenging the state energy policy
13 reflected in Section 10. Mr. Rutter states that the "OUCC's proposal" is "not a benefit
14 and cost test. Rather it is a public policy weighing of how to equitably share the benefits
15 produced by the DSM plan . . . " Pub. Ex. 1S, at 15-16. The public policy weighing was
16 undertaken by the Indiana General Assembly. The task here is to implement the policy
17 enacted by the legislature, not debate it. That policy provides that recovery of all
18 program costs shall be allowed if the Commission approves the DSM Plan. Section
19 10(k). This includes program operating costs, reasonable lost revenues and a reasonable
20 financial incentive.

¹⁶ \$237 million in present value benefits less \$88 million in program operating costs (present valued) equals \$149 million in net present value as calculated by the UCT.

1 **X. FINANCIAL INCENTIVES**

2 **Q42. Mr. Rutter indicates that the OUCC is supportive of reasonable performance**
3 **incentives (Direct, p. 17; Settlement, p. 17). Please respond.**

4 A42. While this statement appears in Mr. Rutter's testimony, Mr. Rutter's testimony is not
5 consistent with these words. As Mr. Miller shows in his rebuttal testimony (Q/A 15), the
6 OUCC recommendation that cost recovery be limited to 50% of the UCT would
7 effectively deny IPL any financial incentive. It would also deny IPL the ability to recover
8 any lost revenues, and would only allow recovery of 85% of the program operating costs.
9 Placing the UCT cap proposal aside, under Mr. Rutter's proposal that the 30-Day
10 Treasury Bill rate be used as the financial incentive, would result in customers retaining
11 99.25% of the benefits and IPL would effectively receive only 0.75% of the benefits as a
12 financial incentive. This is not reasonable.

13 **Q43. Mr. Rutter (Direct pp. 17-19) states that "there is no logical reason to award an**
14 **incentive that is greater than the risk free cost of debt, represented by the 30-Day**
15 **Treasury Bond rate of 1.23% on ratepayer supplied funds." In his settlement**
16 **testimony (p. 18), he states that it is unreasonable to award IPL an incentive that is**
17 **greater than the risk free cost of debt represented by either the 30-Day or 30-Year**
18 **U.S. Treasury Bond rate. What are U.S. Treasury debt instruments?**

19 A43. Mr. Rutter discusses both Treasury Bonds and T-Bills in his testimony. A U.S. Treasury
20 bond (sometimes also referred to as a "T-Bond") is a debt obligation that is backed by the
21 United States Treasury Department, with a maturity greater than ten years. The "30-Year

1 Treasury” is a subset of T-bonds, carrying maturities of 30 years. Short term “T-Bills,” in
2 contrast, have maturities of just a few days up to a maximum of 52 weeks.

3 For T-bills, the investor does not receive regular interest payments during the life of the
4 investment. Instead, the T-bill is issued at a “discount” (an amount less than face-value),
5 and the interest is paid upon maturity, when the investor receives the face-value of the
6 T-bill. The interest on T-bills, then, is the difference between the purchase price and the
7 maturity value, divided by the maturity value. In contrast, T-Bonds will pay periodic
8 interest to the bond-holder (and they may be purchased at a premium or a discount in the
9 secondary market, which is an additional component of interest earned).

10 In either instance, U.S. Treasuries offer a very low-risk way to earn a guaranteed return.
11 T-bills have to compete with inflation. For example, if the T-bill yield is 1% and inflation
12 exceeds that (e.g. 3%) the investment in the T-bill will actually lose money in real terms.

13 **Q44. What is the 30 Day Treasury Bill rate?**

14 A44. The rates for Treasury Bills vary. For example over the period August 1 through
15 September 12, 2017 (the date the OUCC filed its testimony), the 30 day T-Bill rate traded
16 in a narrow range from 0.97 % to 1.08%. I did verify that the 1.23% cited in Mr. Rutter’s
17 direct testimony (p. 17) was, the yield on a 52 week T-Bill on several occasions in August
18 and September, 2017. The 52-week T-Bill has a much longer maturity and typically a
19 higher rate than the 30 Day T-Bill Mr. Rutter referenced in his testimony. Regardless, the
20 rate he identifies is unreasonably low as a Section 10 financial incentive for the reasons
21 explained below.

1 **Q45. Did Mr. Rutter identify the 30-year U.S. Treasury Bond rate in his Settlement**
2 **Testimony?**

3 A45. No. He states that reasonable financial incentives should not exceed the risk-free debt
4 rate, such as the 30-day T-bill or 30-year U.S. Treasury Bond rate in effect at the time a
5 utility's DSM Plan is approved.¹⁷ He did not specifically identify the 30 year rate or
6 explain why he revised his earlier recommendation to include it. My understanding is
7 that the 30-year Treasury will generally pay a higher interest rate than shorter Treasuries
8 to compensate for the additional risks in herein in the longer maturity. The 30-year
9 Treasury Rate varies. For example, it was at 2.89% for October 5, 2017 and 2.69% at
10 September 5, 2017.

11 **Q46. Do you agree with Mr. Rutter's recommendation that the 30-day or 30-year**
12 **Treasury rate would be a reasonable financial incentive for this Section 10 DSM**
13 **Plan?**

14 A46. No. Section 10 provides for a "reasonable financial incentive." A financial incentive is a
15 monetary benefit offered to encourage behavior or actions that the person or company
16 would not normally do. One source defines a financial incentive as follows:

17 A benefit given to customers or companies to get them to do something they
18 normally wouldn't. It is money offered to get them to try something new
19 offered. The event might not have happened without the incentive.¹⁸

20
21 This is a reasonable definition and is consistent with the plain meaning of the words

¹⁷ Mr. Rutter (Settlement p. 24) refers to both the 30 day and 30 year as a "bill" but I presume his 30 year reference is to the U.S. Treasury 30 Year bond.

¹⁸ <http://thelawdictionary.org/>

1 “financial” and “incentive”. Mr. Rutter’s recommendation is not consistent with the
2 meaning of the words “financial incentive.”

3 **Q47. Please explain.**

4 A47. Normally, a company that sells a service would not work proactively to encourage
5 customers not to use the company’s service. Here, public policy, as enacted by our
6 legislature, requires IPL (and other utilities) to acquire energy efficiency for customers.
7 Put another way, the utilities are required to proactively influence customers *not* to use
8 the utility’s retail electric service. The extent of the energy efficiency to be purchased for
9 customers is determined by the IRP and other factors listed in the definition of “energy
10 efficiency goals” in Section 10 (c).

11 Boiled down, under the Settlement Agreement customers would pay rates that reflect
12 approximately \$88 million in present valued program operating costs to be incurred by
13 IPL to acquire approximately \$237 million in energy savings benefits.¹⁹ Mr. Rutter
14 argues that because this payment stream is “risk free”, IPL’s financial incentive should
15 not exceed the risk free cost of debt as represented by the 30-Day T-bill or 30-year
16 Treasury Bond.

17 The return to the customers of \$237 million of benefits is not risk free. As described in
18 our direct and settlement testimony, IPL worked for approximately 18 months to put the
19 DSM Plan together. Our work does not stop with a Commission order approving the

¹⁹ These amounts reflect the DSM Plan as modified by the Settlement Agreement. The original DSM Plan was forecast to achieve approximately \$196 million in energy savings benefits with an investment in program operating costs of \$78.2 million.

1 Settlement Agreement. Rather we must engage and manage vendors and customers have
2 to be convinced to take action. As explained in my settlement testimony (p. 14), the goals
3 in the Settlement Agreement are challenging to achieve. There are also economic
4 considerations and challenges as discussed below.

5 The risk free rate of return is the rate a consumer pays to simply have his or her money
6 safeguarded. Under the Settlement Agreement, IPL will be charged with spending
7 approximately \$88 million to acquire, for customers, demand side benefits of
8 approximately \$237 million. This is a net 169% increase in the customer investment.

9 The risk free rate of return is not a reasonable financial incentive for this effort. We know
10 that because that is the rate a customer pays to have its money safeguarded and returned.

11 In other words, the 30-day Treasury Bill interest rate is what a customer would pay to
12 have a third party take the \$82 million and return the same amount adjusted for inflation
13 (as reflected in the Treasury rate for the period) 30 days later. And the 30-year treasury
14 rate is what a customer would pay to have a third party do the same thing over a longer
15 period of time. Because IPL is being asked to return substantially more than this amount
16 to customers, Mr. Rutter's proposal is unreasonable.

17 **Q48. Do you have any other comments on Mr. Rutter's contention that the Treasury Bill**
18 **rate is a reasonable financial incentive?**

19 A48. Yes. Under the Settlement Agreement, customers will receive 92% of the net UCT
20 benefits if IPL achieves 100% of the plan goal. IPL will receive 8% as previously
21 quantified in Table 1 above in Q/A 17.

1 If I am interpreting Mr. Rutter's argument correctly and using the rate cited in his direct
2 testimony, he would have IPL realize a 1.23% return on invested program operating
3 costs. This would equate to a \$1,128,559 financial incentive over the three-year plan.
4 This would mean that IPL's share of the three-year plan UCT net benefits of
5 \$149,795,759 would be 0.75%. The customer would receive 99.25% of the benefits.

6 In either case, the financial incentive to IPL would be unreasonable as explained above.

7 In other situations, such as off system sales, where the Commission has desired to
8 encourage a utility to act, the Commission has authorized a 50/50 sharing of margins
9 (above or below the amount embedded in basic rates). This structure recognizes that
10 many factors beyond the utility's control impact the utility's ability to make OSS.

11 This is also the case with respect to EE. There are many factors beyond IPL's control
12 when it comes to EE. While IPL has and will continue to make a concerted effort to
13 reasonably implement and manage the programs, IPL's implementation of the DSM Plan
14 will be challenged by changing market conditions, baseline savings erosion and
15 consumer decision-making. Customers have to have funds available to invest in energy
16 efficient equipment. As noted above, there is also evaluation risk.

17 **Q49. Do you agree with Mr. Rutter's contention (Direct, p. 18; Settlement, p. 18) that**
18 **"DSM shareholders have no risk, as the DSM program goals are set by IPL and**
19 **funded 100% by IPL ratepayers"?**

20 **A49.** No. First, the program goals are not set by IPL. The goals are determined by the IRP and
21 other factors listed in the definition of "energy efficiency goals" in Section 10 (c) and set

1 by Commission Order. Second, assuming Mr. Rutter's reference to "DSM shareholders"
2 refers to IPL's shareholders, I disagree that they have no risk. Under Mr. Rutter's
3 proposal, cost recovery would be capped at 50% of the UCT. As stated above and
4 explained by IPL Witness Miller, if Mr. Rutter's proposal were imposed, IPL would not
5 even recover all the program operating costs, much less its lost revenues and financial
6 incentives.

7 **Q50. Mr. Rutter (Direct p. 19; Settlement, at 18) states that the OUC recommends that**
8 **any financial incentive be calculated on a program level and adds (Direct pp. 18-19;**
9 **Settlement, p. 17) that "financial incentives should be calculated only for programs**
10 **achieving 100% of the estimated savings contained within the plan." Do you agree?**

11 A50. No, I do not agree. Requiring that financial incentives be awarded at the program level
12 rather than the portfolio level would be counter-productive. It would dissuade our goal of
13 achieving the overall EE goals by encouraging IPL to continue to pursue programs that
14 are not performing well. It could cause the utility to continue to pursue less cost-effective
15 programs. This constraint would also have the unintended consequence of discouraging
16 the pursuit of new programs or ideas and thus limiting program innovation.

17 If certain programs are underperforming due to less than expected customer adoption or
18 less than expected savings levels, IPL needs the flexibility, with the approval of the IPL
19 Oversight Board, to move funds and shift efforts to programs that are performing well.
20 The movement of dollars from one program from another program provides the
21 opportunity to maximize the economic benefit for all parties. Therefore, the utility

1 should have the flexibility to determine goal achievement at the portfolio level rather
2 than the individual program level. IPL and the IPL OSB have employed this approach
3 successfully for many years and it would be appropriate to continue this construct.

4 **Q51. Why is the rewarding of financial incentives on a shared savings basis reasonable?**

5 A51. Allowing utilities to earn financial incentives based on a shared savings approach, while
6 also allowing for some level of incentive at levels below 100% goal achievement, aligns
7 the utility interest with the customer interest.

8 **XI. INCREASED SAVINGS**

9 **Q52. Does IPL agree that the energy savings goals in the Settlement Agreement violate**
10 **Section 10 as argued by Mr. Rutter (Settlement, at 20-23)?**

11 A52. No. I addressed this issue in my Settlement Direct (pp. 11-13). IPL Witness Miller
12 further responds to Mr. Rutter's arguments in his rebuttal testimony.

13 **XII. REASONABLENESS OF DSM PLAN AS MODIFIED BY THE**
14 **SETTLEMENT AGREEMENT**

15 **Q53. In Mr. Rutter's opinion, neither the original DSM Plan, nor the DSM Plan as**
16 **modified by the Settlement Agreement meets what he refers to as the "overall**
17 **reasonableness" standard of Section 10. (Pub. Ex. 1S, p. 23; Pub. Ex. 1 pp. 21-23).**
18 **He recommends the Commission reject the plan as unreasonable in its entirety.**
19 **Please respond.**

20 A53. As I and the other IPL witnesses have demonstrated in our direct testimony and the
21 testimony in support of the Settlement Agreement, the Settling Parties have presented a
22 well-reasoned plan to provide energy efficiency to IPL's customers. The DSM Plan as

1 modified by the Settlement Agreement reasonably responds to the concerns raised by
2 CAC and the OUCC.

3 Mr. Rutter's direct testimony states that the Commission should look at Section 10(j)
4 subparts (2), (7) and (8). These subparts have been addressed in IPL's direct testimony,
5 the direct testimony of the Settling Parties and the Settling Parties' rebuttal testimony, all
6 of which shows that Mr. Rutter's recommendation should be rejected.

7 The Settlement Agreement that IPL has reached with the Citizens Action Coalition
8 represents a reasonable compromise to our original DSM plan as filed in Direct
9 Testimony. IPL has correctly calculated and transparently presented the agreed DSM
10 Plan costs and impact on rates. The agreed DSM Plan energy savings goals, while more
11 challenging than IPL's original proposal, are reasonably achievable, consistent with
12 IPL's IRP and designed to achieve an optimal balance of energy resources in IPL's
13 service territory. The IPL 2018-2020 DSM Plan, as modified by the Settlement
14 Agreement, provides IPL's customers with the opportunity to pursue cost-effective DSM
15 and reasonably empowers the IPL OSB to respond to market demand as the future
16 unfolds. The lost revenue and financial incentive proposals in the Settlement Agreement
17 are reasonable. In sum, the 2018-2020 DSM Plan as modified by the Settlement
18 Agreement is reasonable and should be approved as filed in order to allow IPL's
19 customers timely access to these DSM programs.

20 **Q54. Does this conclude your pre-filed verified rebuttal testimony?**

21 A54. Yes.

VERIFICATION

I, Lester H. Allen, DSM Program Development Manager for 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.

A handwritten signature in cursive script, appearing to read "Lester H. Allen", written over a horizontal line.

Lester H. Allen

Dated: October 16, 2017.

**IPL Oversight Board Meeting
November 30, 2016
Meeting Minutes**

Attendees:

IPL	OUCC	CAC
Erik Miller Jake Allen Zac Elliot Glenn Livers	Ed Rutter	Jennifer Washburn

1. Approval of Minutes:

The minutes of the October meeting were approved.

2. Status of Action Items:

There is one open Action Item, which is to be discussed at today's meeting:

- IPL will provide revised proposals for additional funding for both GoodCents administered residential programs and the Commercial/Industrial Prescriptive and Custom programs. Proposals will clarify the use of carry-over vs. spending flexibility funds.

New Action Item:

- None.

3. Scorecard/Program Review

- With 83% of the year complete, the portfolio has achieved 105% of the 2016 Planning Goal for Gross Energy Impacts with expenditures at 83% of the approved budget.
- Residential: the portfolio overall will end the year very close to 100% of the Gross Energy Impacts goal.
 - Appliance Recycling: expectations are that this program will meet goal by year-end, which is a very notable achievement given the late start as we transitioned to our new delivery vendor, ARCA.
 - Home Energy Assessment: IPL's delivery vendor GoodCents has recently brought in extra staff to assist in reaching goal by year-end.
 - Income Qualified Weatherization (IQW): the program continues to experience an imbalance between the number of homes participating and opportunities for air sealing and insulation, resulting in lower energy savings per home compared to what was originally projected. However, GoodCents has recently made improvements to their processes that are expected to close the gap between number of homes/measures implemented and energy savings. One example is the reinstatement of the Community Outreach and Education program (COE), which allows selected non-profit groups to assist IPL in participant outreach and enrollments.

- Lighting: achievement is currently at 67% of the Energy Savings Goal. However, it is expected that the recent transition to primarily LEDs, rather than a mix of LEDs and CFLs, will result in the program ending the year close to the energy saving goal.
- Peer Comparison Reports: program has already achieved the 2016 Energy Savings Goal.
- On-line Kits/School Kits: both programs are expected to meet the goal before the end of the year.
- Commercial & Industrial:
 - Portfolio has already exceeded the Gross Energy Impacts goal for the year, due to the robust performance of the Prescriptive program.

4. Proposal for Clarifying Sources of Additional Funding Requests

- At the October meeting, the OSB asked IPL to clarify and recast the source of incremental funds that are/have been requested and approved for program budgets throughout the year, as allowed by the IURC Order in Cause No. 44497. The possible sources of additional funding are:
 - Unspent budget amounts from the prior year(s) (i.e. "Carry Over");
 - Spending Flexibility, which allows additional spending of 10% of approved program budgets;
 - Emerging Technology Fund, intended for the implementation of new programs or technologies to produce cost-effective savings that were unanticipated during the regulatory filing and approval process.
- The proposal provided at today's meeting, and the accompanying spreadsheet, illustrate the original program budgets per Cause No. 44497 and the amount of additional funding in total for the residential and business customer programs that has been requested since January 2015. It also illustrates the source for the additional funding.
- The OSB approved the proposal at the meeting. The IPL Scorecard will be updated to reflect these adjustments.

5. Update on RFP Process for 2018-2020 DSM Program Delivery Vendors

- IPL released the RFP on November 10, 2016.
- To date, IPL has received 32 "Intent to Bid" responses.
- Proposals are due by December 16, 2016.

6. Update on Residential Smart Thermostat Pilot

- Draft evaluation results should be available in early 2017.
- Early feedback from GoodCents installers is that the Honeywell device has more frequent compatibility issues than the NEST device, particularly when installed on dual-fuel systems.

7. Update on 2017 Program Delivery Vendor Contracting

- Progress is being made to have contract extensions with current vendors executed by year-end so work can continue seamlessly through 2017.
- IPL proposed, and the OSB approved, extending the contract with Cadmus (EM&V) through 2017. An RFP will be issued to select an EM&V vendor for 2018-2020.

8. Other Items As Necessary

None.

Next IPL OSB meeting is scheduled for Wednesday, January 25th at 2:30 at the OUCC offices.