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Petitioner's Exhibit No. 7 Vectren South Page 1 of 19

### SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a VECTREN ENERGY DELIVERY OF INDIANA, INC. (VECTREN SOUTH)

**IURC CAUSE NO. 44910** 

### DIRECT TESTIMONY OF SCOTT E. ALBERTSON VICE PRESIDENT, REGULATORY AFFAIRS AND GAS SUPPLY

ON

#### TDSIC COST ALLOCATION AND RATE DESIGN

SPONSORING PETITIONER'S EXHIBIT NO. 7, ATTACHMENT SEA-1

#### **DIRECT TESTIMONY OF SCOTT E. ALBERTSON**

Ι. INTRODUCTION 1 2 3 Q. Please state your name and business address. 4 Α. Scott E. Albertson 5 **One Vectren Square** 6 Evansville, Indiana 47708 7 8 What position do you hold with Petitioner Southern Indiana Gas and Q. 9 Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. ("Vectren 10 South" or "the Company")? 11 Α. I am Vice President, Regulatory Affairs and Gas Supply for Vectren Utility 12 Holdings, Inc. ("VUHI"), the immediate parent company of Vectren South. I hold 13 the same position with the three utility subsidiaries of VUHI – Vectren South, 14 Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of Indiana, Inc. 15 ("Vectren North") and Vectren Energy Delivery of Ohio, Inc. ("Vectren Ohio"). 16 17 Q. Please describe your educational background. 18 Α. I received a Bachelor of Science degree in mechanical engineering from Rose-19 Hulman Institute of Technology in 1984. I have been a professional engineer in 20 Indiana since 1990. 21 22 Q. Please describe your professional experience. 23 Α. I have over 30 years' experience in the utility industry. I began my career with 24 Ohio Valley Gas Corporation in a project engineering position. I have worked at 25 VUHI and its predecessor companies since 1987 in a variety of positions including Operations Staff Manager, Assistant Chief Engineer, Director of 26 27 Engineering Projects, Director of Engineering, and Director of Technical 28 Services. I was named Director of Regulatory Affairs for VUHI in 2004, and was 29 promoted to my current position effective July 1, 2012. 30 31 Q. What are your present duties and responsibilities as Vice President, 32 **Regulatory Affairs and Gas Supply?** 

A. I have responsibility for coordinating regulatory and rate matters of the regulated
 utilities within VUHI in proceedings before the Indiana and Ohio utility regulatory
 commissions. In addition, I am also responsible for overseeing the gas supply
 and gas transportation functions for VUHI's three gas utilities.

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#### Q. Have you previously testified before this Commission?

A. Yes. I testified in Vectren South's two most recent gas general rate cases
(Cause Nos. 43112 and 42596), in Vectren North's two most recent general rate
cases (Cause Nos. 43298 and 42598), and in Vectren South's most recent
electric general rate case (Cause No. 43839). I have also testified in numerous
Gas Cost Adjustment ("GCA"), Fuel Adjustment Clause ("FAC"), and other
regulatory proceedings on behalf of Vectren North and Vectren South.

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#### 14 Q. What is the purpose of your testimony in this proceeding?

15 Α. My testimony supports Vectren South's proposal to implement a rate adjustment 16 mechanism for the recovery of costs incurred pursuant to Ind. Code Ch. 8-1-39 17 ("TDSIC Statute") (the "TDSIC Plan"). Vectren South witness J. Cas Swiz 18 sponsors testimony regarding the Company's proposed Transmission, 19 Distribution, and Storage System Improvement Charge ("TDSIC") adjustment for 20 recovery of costs under the TDSIC Statute, including the proposed filing 21 schedules to be included in each semi-annual TDSIC filing as well as the 22 proposed additions to Vectren South's Tariff for Electric Service. My testimony 23 will describe the Company's proposal for the allocation of TDSIC costs, along 24 with its proposed rate design for the recovery of those costs.

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#### 26 Q. Are you sponsoring any exhibits in this proceeding?

- 27 A. Yes. I am sponsoring the following exhibit in this proceeding:
  - <u>Petitioner's Exhibit No. 7</u>, **Attachment SEA-1**: Vectren South's proposed rate schedule allocation percentages for the recovery of TDSIC costs.
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### Q. Please summarize Vectren South's cost allocation and rate design objectives in this filing.

33 A. Regarding the allocation of TDSIC costs among rate schedules, Vectren South's

proposed methodology achieves two key objectives: appropriately allocating
 TDSIC costs according to cost causation principles, and avoiding increases to
 subsidies between rate schedules. Vectren South is proposing to allocate the
 TDSIC revenue requirement among rate schedules using allocation percentages
 based on the transmission and distribution revenue requirements from the
 compliance cost of service study in its last general rate case, Cause No. 43839.

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8 When developing its proposed TDSIC rate design, Vectren South has focused on 9 sending appropriate price signals to customers and ensuring that TDSIC costs 10 are recovered through rates that reflect cost causation and minimize intra-class 11 subsidies that would result from the recovery of all fixed TDSIC costs through 12 variable energy charges. As such, the Company has designed the proposed 13 TDSIC rate adjustment mechanism to recover the Distribution revenue 14 requirement amount, representing fixed costs, via a fixed monthly charge per 15 customer for its Residential Standard and Water Heating (Rate Schedules RS 16 and B), and Small General Service (Rate Schedule SGS) customers. The 17 proposed Transmission revenue requirement amount will be recovered via a 18 volumetric (kilowatt hour ("kWh")) charge for Rate RS, Rate B and Rate SGS 19 customers. For the Company's remaining Rate Schedules – Demand General 20 Service (DGS), Municipal Levee Authority Service (MLA), Off-Season Service 21 (OSS), Large Power Service (LP), Backup, Auxiliary and Maintenance Power 22 Services (BAMP), and High Load Factor Service (HLF) – both the Distribution 23 and Transmission revenue requirement amounts will be recovered via a demand 24 (kilowatt ("kW") or kilovolt-ampere ("kVa")) charge. Street Lighting and Outdoor 25 Lighting (Rate Schedules SL and OL, or "Lighting") customers pay only fixed 26 charges per light in base rates; as these lights are unmetered, Vectren South will 27 recover all TDSIC costs from these customers through fixed monthly charges.

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#### 30 II. ALLOCATION OF TDSIC COSTS

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### Q. Please describe how Vectren South proposes to allocate TDSIC costs to its rate schedules.

A. As stated previously, the Company proposes to allocate TDSIC costs to its rate
schedules based on Transmission and Distribution revenue requirements (i.e.,
revenues) from its last rate case, Cause No. 43839. The allocation of TDSIC
costs is consistent with the compliance cost of service study filed by Vectren
South following the Commission's order in that proceeding.

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## Q. Why is it appropriate to utilize Transmission and Distribution revenue requirements from Vectren South's last rate case?

9 Α. The use of the revenue requirements related to Transmission and Distribution 10 costs from Vectren South's last rate case is appropriate given that, by definition, 11 the TDSIC Plan is comprised of Transmission and Distribution investments. Allocating TDSIC costs<sup>1</sup> in the same manner as Transmission and Distribution 12 13 costs were allocated in the last rate case appropriately assigns those costs to the 14 rate schedules based on cost causation principles (i.e., Transmission and 15 Distribution costs are allocated to the rate schedules based on each rate 16 schedule's proportionate share of the Transmission and Distribution systems, The proposed allocation methodology recognizes the 17 respectively). 18 appropriateness of allocating TDSIC costs by function in order to create TDSIC 19 charges that are aligned with cost causation. Any other allocation methodology 20 would reasonably be expected to result in additional inter-class subsidies over 21 time. I will discuss subsidies more throughout my direct testimony.

22

Q. Are the allocation percentages proposed herein applicable to TDSIC
 Transmission and Distribution costs subject to modification at the time
 Vectren South files its next base rate case?

A. Yes. A cost of service study prepared at the time of the next base rate case will
identify at that time how all costs should be allocated based on each rate
schedule's proportionate share of each component of the electric system during
the test year in that proceeding. However, use of the Company's compliance
cost of service in Cause No. 43839 is a reasonable basis to reflect cost causation

<sup>&</sup>lt;sup>1</sup> Ind. Code § 8-1-39-7 defines TDSIC costs as those "incurred with respect to eligible transmission, distribution, and storage system improvements incurred both while the improvements are under construction and post in service: (1) Depreciation expenses, (2) Operation and maintenance expenses, (3) Extensions and replacements to the extent not provided for through depreciation, in the manner provided for in IC 8-1.5-3-8, (4) Property taxes, and (5) Pretax returns."

- in the TDSIC rates and charges proposed in this proceeding, and (as discussed
   later in my direct testimony) is in keeping with the requirements of the TDSIC
   Statute.
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### 5 Q. Why is it important to allocate TDSIC costs consistent with "cost causation 6 principles"?

7 Α. Cost causation is a fundamental principle in utility ratemaking and simply implies 8 that customers who cause costs to be incurred should pay for those costs 9 through their applicable rates. To be clear, this principle applies not just to 10 TDSIC costs, but utility costs in general. If TDSIC costs are not allocated 11 consistent with this principle, inter-class subsidies will be created whereby one 12 class of customers is paying an additional amount to compensate for another 13 class of customers not paying the appropriate full allocated share of costs 14 incurred to serve.

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## Q. What allocation percentages is Vectren South proposing for the recovery of TDSIC costs in this proceeding?

A. The table below reflects the proposed allocation percentages, as shown in
Attachment SEA-1, that Vectren South will apply to the Transmission and
Distribution revenue requirements in each TDSIC filing:

Rate Schedule	<u>Transmission</u> <u>Allocation</u> Percentage	Distribution Allocation Percentage
RS	42.62%	58.44%
В	0.13%	1.12%
SGS	1.82%	4.10%
DGS/MLA	27.33%	22.53%
OSS	2.12%	2.32%
LP	25.33%	10.59%
HLF	0.65%	0.01%
SL/OL	0.00%	0.89%

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## Q. Has this type of allocation methodology been approved for the recovery of TDSIC costs for any other Indiana utilities?

25 A. Yes, as part of the approved settlement in NIPSCO's last general rate case,

1 Cause No. 44688, separate allocation percentages were established for the 2 Transmission and Distribution costs to be recovered within NIPSCO's electric 3 TDSIC adjustment mechanism. In addition, as part of the settlement within Duke 4 Energy Indiana's electric TDSIC proceeding, Cause No. 44720, Transmission 5 and Distribution TDSIC costs have been identified to produce separate 6 Transmission and Distribution revenue requirements, which are then allocated to 7 the rate schedules using the applicable separate Transmission and Distribution 8 allocation percentages. While these settlements are not precedential upon future 9 TDSIC proceedings, they do indicate a willingness among Indiana energy 10 stakeholders to agree in principle that it is appropriate to allocate Transmission 11 and Distribution TDSIC costs separately, based on each class of customer's (or 12 rate schedule's) responsibility for the electric system.

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### Q. Does Vectren South's proposed TDSIC cost allocation methodology comply with the TDSIC Statute?

A. Yes it does. Ind. Code § 8-1-39-9(a) ("Section 9(a)") prescribes that a TDSIC
petition (and, it follows, TDSIC cost recovery) "use the customer class revenue
allocation factor based on firm load approved in the public utility's most recent
retail base rate case order." The proposed allocation methodology uses the
customer class revenue allocation factors specific to transmission and
distribution from the Company's last rate case.

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#### 24 III. RATE DESIGN

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### Q. What rate design principles do you believe are relevant in designing TDSIC rates and charges?

- A. The Company's TDSIC rate design proposal is based on the following keyprinciples/objectives:
- Rate design should provide accurate price signals to customers based upon
   the costs attributed to service; and

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Rate design should eliminate, or at the very least mitigate to a great extent, any intra-class subsidies that would result from how customers with the same or similar power requirements use energy differently.

5 These rate design principles are important for several reasons. If a rate is 6 designed whereby the cost of the service provided is not linked directly to the 7 result of that service (e.g., a rate based on energy usage designed to recover 8 costs that do not vary by energy consumed), the customer erroneously believes 9 that adjusting usage will impact the overall cost of the service provided. This 10 customer might make investments to help reduce his or her bill, justifying the 11 investment with perceived savings. In actuality, the customer's decision to 12 reduce usage (and therefore their bill) does not directly impact the costs to 13 provide that service, and simply (1) shifts the costs to another customer (intra-14 class subsidy), or (2) delays the costs until the utility can adjust its rates. 15 Conversely, if a customer increases usage and fixed cost recovery is linked to 16 that usage, that customer will overpay for service. Changes in fixed costs should 17 be reflected in changes to fixed charges, and likewise changes in variable costs 18 should be linked to variable charges. Fuel costs are a good example: when a 19 customer's usage increases or decreases, the fuel costs on their bill reflect the 20 higher or lower variable costs incurred by the utility. In contrast to fuel cost 21 recovery, however, changes in usage do not impact the fixed costs the utility has 22 incurred. Said differently, fixed cost recovery through variable charges is akin to 23 variable (e.g. fuel) cost recovery via a fixed charge. Obviously legacy utility rate 24 designs include fixed cost recovery in variable charges. Vectren South is 25 proposing in this proceeding to not perpetuate that rate design.

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## Q. How does Vectren South propose to recover its TDSIC costs from customers?

A. Generally speaking, for customers with demand meters<sup>2</sup> the Company proposes
to recover 100% of its TDSIC costs through demand charges. For customers
that do not have demand meters, the Company proposes to recover 100% of

<sup>&</sup>lt;sup>2</sup> Demand-metered customers include those receiving service pursuant to Rates DGS, MLA, OSS, LP, BAMP, and HLF.

Distribution costs through a fixed monthly charge, with Transmission costs
 recovered via a volumetric (energy) charge. As stated previously, all TDSIC
 costs will be recovered from Lighting customers through fixed monthly charges.
 This approach satisfies Vectren South's rate design objectives.

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Q. How does the recovery of TDSIC Distribution costs from smaller customers (i.e Rates RS, B and SGS) through a fixed monthly charge and TDSIC Transmission costs via a volumetric energy charge promote the rate design principles you have articulated?

A. The Distribution costs included in Vectren South's TDSIC Plan are fixed costs
that do not vary in the short-term based on changes in customer usage.
Recovering these costs through a volumetric energy charge would maintain, and
potentially increase, a level of intra-class subsidization within Vectren South's
residential rate schedule, violating the ratemaking principle of cost causation, a
central tenet of proper rate design.

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17 Transmission costs, although fixed, do vary in the long-term based on changes in 18 customers' demand requirements. As stated previously, the Company proposes 19 to recover all TDSIC costs from demand-metered customers through demand 20 charges to align the cause (demand) with the costs incurred. As the Company 21 does not *currently* measure actual demand for its smaller customers, Vectren 22 South proposes volumetric (energy) charges to recover TDSIC Transmission 23 costs from smaller customers until the Company's next base rate proceeding. At 24 that point, given some of the investments in the Company's proposed TDSIC 25 Plan, metered demand charges can be considered for the recovery of these 26 Transmission costs in order to better align cost recovery with cost causation.

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- Q. Is it more appropriate then to recover TDSIC Distribution costs from larger
   (demand-metered) customers through a fixed monthly charge?

A. No. There is simply too much variability in the load and service requirements of
 customers in each of the larger rate schedules to recover TDSIC costs through
 an "average" fixed monthly charge. Including TDSIC Distribution costs (along
 with TDSIC Transmission costs) in a demand charge is the appropriate way to

- recover those costs from larger customers given the varied demand they place
   on the electric system, and the metering capability in place to accurately capture
   those customers' individual demands.
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### Q. What is currently happening in the electric industry to drive a focus on these key rate design principles?

7 Α. There is a clear recognition among a variety of stakeholders around the country, 8 including regulators and consumer advocates, that the electric utility operating 9 landscape is transforming. As Vectren South witness Russell A. Feingold 10 discusses in his direct testimony, the industry is changing drastically in response 11 to new technologies: customer energy management preferences, societal 12 expectations regarding energy conservation, commodity market dynamics, 13 political change, and new opportunities for collaboration among electric utilities, policy makers, and other stakeholders. However, effectively addressing these 14 15 challenges and taking full advantage of these opportunities will succeed only if 16 based upon a foundation of proper rate design in which the costs of operating 17 and maintaining the electric grid are recognized in rate design, utility costs are 18 allocated to those customers who cause them to be incurred, and customers are 19 presented appropriate price signals enabling them to make informed decisions 20 about available energy technologies and their use of the electric system.

20 21

> 22 The result of these developments has been a steadily increasing change in 23 homogeneity among residential electric customers in particular. Changing 24 residential customer load characteristics, due to energy efficiency and distributed 25 generation, have led to a decline in average use per customer, and the evolution 26 of the demands individual residential customers place on the electric system – as 27 well as the functions they require from the system -- continues, making it critical 28 that utility rates convey appropriate price signals. Such price signals should 29 reflect the nature of the underlying cost of service, address intra- and inter-class 30 subsidies, create a level playing field for all emerging energy technologies and 31 energy efficiency, encourage customers to use electricity more efficiently, and 32 facilitate reductions in peak demands on the utility system. Recovering TDSIC

- Distribution costs via a fixed monthly charge sends the appropriate price signal to
   residential customers.
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### Q. Please comment on the proposed rate design for Vectren South's other non-demand metered rate schedules.

6 Α. Vectren South is proposing the same rate design for its other non-demand 7 metered rate schedules (Rates B and SGS). While customers receiving service 8 under these rate schedules are not anticipated to change their electric 9 load/usage and service requirements to the same degree as residential 10 customers, Vectren South's rate design objectives are no less applicable to these 11 rate schedules than to the residential rate schedule. The Distribution costs 12 included in Vectren South's TDSIC plan are fixed costs that do not vary based on 13 customer usage; therefore, the appropriate price signal is to recover the 14 distribution costs allocated to these rate schedules in the same manner as they 15 are recovered from the residential rate schedule.

16

# Q. Why does the Company propose to recover TDSIC Transmission costs from smaller customers through a volumetric energy charge, as opposed to a fixed charge?

20 Α. Customers within each rate schedule use the Company's transmission system 21 differently. While a large portion of the Company's distribution costs to serve (for 22 example) residential customers do not vary materially based on a given 23 customer's size (or demand), the transmission costs to serve those customers do 24 vary based on the demand requirements of that class. In its TDSIC Plan herein, 25 Vectren South is proposing investments in technologies that will, once 26 implemented, allow customers to better respond to energy prices and manage 27 the peak demand they place on the Company's electricity system. While the 28 Company is not making such a proposal here, it may be appropriate in the next 29 rate case to consider whether at least a portion of its transmission costs should 30 be included in a demand charge for smaller customers. In any event, since 31 transmission costs (while fixed in nature) do vary based on a customer's peak 32 demand on the system, it is appropriate at this time to include those costs in an 33 energy charge. The effect of including Transmission TDSIC costs in an energy

charge will be that the more energy a customer uses, the greater the portion of
 TDSIC costs that customer will pay; while perhaps imperfect this energy/demand
 correlation is more akin to a scenario in which more Transmission costs are
 recovered from (relatively) larger customers through a demand charge.

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## Q. Is Vectren South proposing a straight fixed-variable rate design for residential customers in this proceeding?

8 Α. No it is not. Rather, Vectren South's proposal takes advantage of the unique 9 opportunity enabled by the TDSIC Statute to incrementally move over time 10 toward a rate design that recovers appropriate fixed costs via fixed charges, 11 consistent with the often-cited, and very salient, ratemaking principle of 12 gradualism which recognizes the need to mitigate potential adverse customer bill 13 impacts that can occur when significant changes to rate design are made in a 14 single step. Gradual movement to recovering a greater amount of fixed costs via 15 fixed charges should not be misconstrued as a proposal to implement a full 16 straight fixed variable rate design.

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### 19 IV. CUSTOMER IMPACTS

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## Q. How will the Company's proposed TDSIC cost allocation and rate design impact Vectren South's customer bills?

A. The applicable fixed, demand, and volumetric TDSIC charges will grow
 throughout the TDSIC Plan period as investments are placed in service over
 time. Witness Swiz presents projected rates and charges for each rate schedule
 in <u>Petitioner's Exhibit No. 9</u>, Attachment JCS-2.

27

# Q. Has Vectren South evaluated the impact of its TDSIC rate design proposal on its smallest residential customers, as gauged by those customers' average monthly energy usage?

A. Yes. In the table below, Vectren South has divided its residential customers<sup>3</sup> into

<sup>&</sup>lt;sup>3</sup> The table includes residential customers having 11 or 12 bills in the consecutive 12-month period ending September 30, 2016.

1 10 equally sized groups. The table shows the average annual usage by 2 residential customer group and the potential impacts of the proposed TDSIC 3 rates and charges through 2024, as presented by witness Swiz, on each 4 residential customer group. While the average residential customer's monthly bill 5 is projected to increase by about 1.65% per year, the smallest 10% of residential 6 customers (as determined by annual energy usage) will see increases of about 7 4.4% per year.

				Average Annual TDSIC Increase to Monthly Bill					
Group (Percentile)	Customer Count	Cumulative Customer Count	Average Monthly kWh	\$	%				
10.00%	11,923	11,923	200	\$2.07	4.38%				
20.00%	11,923	23,846	440	\$2.25	2.67%				
30.00%	11,923	35,769	580	\$2.36	2.25%				
40.00%	11,923	47,692	700	\$2.45	2.00%				
50.00%	11,924	59,616	820	\$2.54	1.81%				
60.00%	11,924	71,540	950	\$2.64	1.65%				
70.00%	11,924	83,464	1,100	\$2.76	1.51%				
80.00%	11,924	95,388	1,300	\$2.91	1.39%				
90.00%	11,924	107,312	1,600	\$3.13	1.28%				
100.00%	11,924	119,236	2,400	\$3.76	1.13%				
	119,236				1.65%				

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#### Q. Please explain why these percentage increases are so different.

11 The differences are a function of Vectren South's current rate design, in which Α. 12 most of its fixed costs (about 90%) are recovered via energy charges. Under the 13 Company's TDSIC rate design proposal, each residential customer will pay the 14 same amount for TDSIC Distribution costs. Since distribution costs paid 15 currently by smaller users are by definition lower than the average customer pays 16 for the same costs (because those costs are for the most part recovered via 17 energy charges), the same dollar impact on the bill will result in a larger 18 percentage increase to the bill.

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#### 20 Q. At the end of the TDSIC Plan period, what percentage of Vectren South's 21 fixed costs will be recovered via energy charges?

22 The gradual increase in fixed charges over time in the TDSIC is projected to Α. 23 result in about 80% of the Company's fixed costs being recovered in an energy 24 charge at that time.

### Q. Can you provide an example to illustrate the relative customer impacts you have described above?

A. Yes. Using data presented in <u>Petitioner's Exhibit No. 9</u>, Attachment JCS-2, in year 1 of the TDSIC, a residential customer using 1,000 kWh per month is projected to pay total TDSIC costs of \$1.61 per month. \$1.19 of that amount, which will be applicable to <u>each</u> residential customer, will recover TDSIC
Distribution costs. That \$1.61 per month equates to a monthly bill increase of about 1.0% for this customer.

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By comparison, a residential customer using 200 kWh per month is projected to pay total TDSIC costs of \$1.27 per month in year 1 of the TDSIC. Again, \$1.19 of that amount will recover TDSIC Distribution costs. The \$1.27 per month equates to a monthly bill increase for this particular customer of about 3.2%.

- 16 In summary, larger energy users will still pay more TDSIC costs (\$1.61 minus 17 \$1.27, or \$0.34 in the example) under the Company's TDSIC rate design 18 proposal than smaller users since Transmission TDSIC costs are proposed for 19 recovery through an energy charge. As discussed previously, this outcome 20 reflects the premise that Transmission costs are higher for larger energy users 21 since they impose higher demands on the system. As the table above further 22 illustrates, even though the annual percentage increases for larger customers are 23 smaller than the increases for smaller customers throughout the TDSIC Plan 24 period, the increases to larger customers' bills are higher.
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#### 26 Q. Please describe the smallest 10% of Vectren South's residential customers.

A. The average monthly energy use of this smallest group of residential customers
is about 200 kWh per month, with the largest among this group using an average
of 360 kWh per month. These customers, while using the same Distribution
services as all other residential customers, do not represent a typical residential
customer. To put these low levels of monthly energy usage in perspective, for
example, 360 kWh represents only about eight (8) 60 watt incandescent bulbs

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- burning continuously for a month.<sup>4</sup> Energy use at these levels is not
   representative of the energy requirements of a residence.
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Q. Is the Company's proposed rate design fair for all residential customers, even the smallest residential customers?

6 Α. The projected impacts on small energy users further illustrates the Yes. 7 importance of ensuring that the rate design is fair for all customers. Naturally the 8 more fixed costs recovered via a volumetric charge, the more that the largest 9 energy users will overpay their cost of service (and, likewise, the more that the 10 smallest users will underpay). And while the gradual increase in fixed charges 11 proposed by the Company in this proceeding will have a greater impact, in terms 12 of the percentage increase in the total bill, on smaller users, that outcome should 13 not be interpreted as smaller users overpaying for service. It simply means that 14 all customers will gradually move towards paying their cost of service. Vectren 15 South's proposal to recover Distribution costs in the TDSIC through a fixed 16 monthly charge for residential customers results in the same cost impact for each 17 customer - which makes sense since the Distribution costs to serve each 18 residential customer are essentially the same.

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20 Simply stated, the more fixed costs included in a fixed TDSIC charge, the more 21 residential customers who use more than the overall average use per residential 22 customer will benefit. Importantly however, it is not a question of whether 23 customers who use relatively less energy should receive a larger percentage 24 increase on their bills, but rather a question of whether the costs included in the 25 rates vary with usage. Since the Distribution TDSIC costs are fixed and do not 26 vary with usage, the appropriate price signal is provided to customers through a 27 fixed TDSIC charge for TDSIC Distribution costs.

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Q.

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What rate design challenges would Vectren South be faced with at the time of its next rate case if TDSIC Distribution costs were recovered from smaller customers through kWh charges during the TDSIC Plan period?

<sup>&</sup>lt;sup>4</sup> 8 bulbs times 60 Watts per bulb times 730 hours per month equals 350 kWh.

1 Α. Since recovery of fixed TDSIC Distribution costs via a fixed monthly charge 2 reduces intra-class subsidies, it follows that recovery of these costs via a kWh 3 charge would increase those subsidies. In that scenario, Vectren South would 4 have moved even further from cost-based rates that send a true price signal to 5 customers. That would leave the Company – and the Commission – in a 6 quandary at the time of the next rate case: either remove the intra-class subsidy 7 at that time (resulting in a more material increase in the fixed monthly charge in a 8 single step, which might reasonably be interpreted as rate shock) or allow the 9 intra-class subsidy to persist even longer. Neither of those outcomes would be 10 desirable and, importantly, they can be mitigated if Vectren South begins to 11 gradually address intra-class subsidies by implementing fixed monthly charges to 12 recover TDSIC Distribution costs from its non-demand metered customers.

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## Q. Does Vectren South currently recover its fixed costs through fixed charges from any of its smaller customers?

- 16 Α. Beyond the portion of fixed costs that are recovered in the applicable monthly 17 Customer Facilities Charge, no. However, the Company continues to support 18 rate designs that provide for the recovery of fixed costs via fixed charges (and, 19 likewise, variable costs via variable charges) and do not make recovery of fixed 20 costs dependent upon customer usage. Vectren South's base rates are not at 21 issue in this proceeding, and the Company is not proposing in this proceeding to 22 modify the currently-effective Customer Facilities Charge applicable to 23 Residential customers – or for that matter, any customer.
- 24

## Q. Has the Commission previously supported movement toward fixed charges for the recovery of fixed costs?

27 Α. Yes, in its March 2016 order in Cause No. 44576, Indianapolis Power and Light 28 Company's ("IPL") 2015-2016 rate case ("IPL Order"), the Commission stated 29 that "cost recovery design alignment with cost causation principles sends efficient 30 price signals to customers, allowing customers to make informed decisions 31 regarding their consumption of the service being provided." (IPL Order, page 32 72.) The Commission also referenced in the IPL Order its conclusion in Cause 33 No. 43180 (in which the Commission investigated rate design alternatives for

1 natural gas utilities): "[the Commission] finds straight-fixed variable rate designs 2 attractive as they align basic cost causation principles of ratemaking." In the IPL 3 Order, the Commission stated the general premise established in Cause No. 4 43180 (i.e. fixed costs recovered through fixed charges) is reasonably applicable 5 to electric utilities in the context of distribution-related costs. Finally, the 6 Commission found that IPL's customer charge increases were "consistent with 7 the Commission's preference for gradual changes in rate structures." (Ibid.) 8 9

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Q. Is Vectren South's proposed TDSIC rate design consistent with the Commission's stated points of view above?

11 A.

Yes.

12

# Q. Does Vectren South's proposed TDSIC rate design impact the Company's ability to fully recover approved TDSIC costs during the TDSIC Plan period?

16 Α. No; specific to overall recovery of the TDSIC costs during the TDSIC Plan period, 17 the Company is financially indifferent to how the approved revenue requirement 18 amount is collected from customers, as any variances to those authorized levels 19 will be reconciled and recovered in subsequent periods, as discussed by witness 20 Swiz. However, as clearly explained previously in my testimony and in the 21 testimony of witness Feingold, and noted by the Commission in the IPL Order, 22 the TDSIC rate design proposal whereby Distribution costs are recovered via a 23 fixed charge properly aligns Vectren South with sound ratemaking, cost 24 causation principles, and the Commission's previous findings. The TDSIC 25 provides for a gradual increase in fixed charges until the next base rate case; 26 continuing to recover these types of costs via only energy charges would 27 continue to send inaccurate price signals to customers, would exacerbate intra-28 class subsidies, and indeed should be considered regressive.

29

# Q. Does Vectren South's proposed TDSIC rate design facilitate the ability to consider alternative rate designs after the conclusion of the 7-year TDSIC Plan period?

33 A. Yes. In the future, Vectren South will continue to evaluate potential rate design

options that improve the price signals provided to customers, allow greater
customer control over energy usage and bills, are based on cost causation,
promote efficient energy use, create a level-playing field for all advanced energy
technologies, and aim to reduce inter- and intra-class subsidies. These options
may include, but are not necessarily limited to:

- Time variant, seasonally differentiated energy charges that reflect an accurate cost of energy produced/procured during peak times of the day/year; and
- Three-part rate designs, that include metered demand charges, potentially
  unbundled by utility function, for all customers, similar to those currently in
  place for most commercial and industrial customers today;
- 12

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8

With the deployment of advanced metering infrastructure, as described in greater detail by Vectren South witness Daniel C. Bugher and included in Vectren South's proposed TDSIC Plan, Vectren South will be able to consider any number of these rate options in the future, potentially providing customers more choices, shaving peak system demands, and creating a level playing field for all emerging advanced energy technologies.

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- 20

#### 21 V. <u>CONCLUSION</u>

22

#### 23 Q. Please summarize your testimony.

24 A. My testimony identifies the benefits of allocating TDSIC costs based on each rate 25 schedule's responsibility for the Transmission and Distribution system. Allocating 26 Transmission and Distribution costs separately, based on the Transmission and 27 Distribution revenues approved in the Company's last base rate case, 28 appropriately assigns each type of cost to the rate schedules based on cost 29 causation principles. The allocation methodology proposed by Vectren South 30 complies with the TDSIC Statute and avoids potential inter-class subsidies that 31 would otherwise grow during the 7-year TDSIC Plan period - subsidies that 32 would then need to be addressed at the time of the Company's next rate case.

33

1 My testimony further identifies the benefits of the Company's proposed TDSIC 2 rate design. Fixed TDISC Distribution charges send the appropriate price signal 3 to smaller customers regarding the services they are receiving. Intra-class 4 subsidies resulting from the adoption by some customers of energy efficiency 5 measures and distributed generation technologies are mitigated to a great extent 6 since the fixed TDSIC Distribution costs are not avoided when those customers 7 reduce their energy consumption or purchase less of their energy requirements 8 from the grid. Finally, the gradual nature of increases to fixed charges for smaller 9 customers during the TDSIC Plan period are part of a framework under which 10 customers can begin to better understand the cost of utility services over time. 11 The provisions of the TDSIC Statute make it possible to begin to gradually 12 transition Vectren South's rate structure to one that better matches the current 13 and future electric industry landscape.

14

#### 15 Q. Does this conclude your direct testimony in this Cause?

16 A. Yes, at this time.

#### VERIFICATION

I, Scott E. Albertson, Vice President of Regulatory Affairs and Gas Supply for Vectren Utility Holdings, Inc., under penalty of perjury, affirm that the foregoing representations are true and correct to the best of my knowledge, information and belief.

> SOUTHERN INDIANA GAS AND ELECTRIC COMPANY D/B/A VECTREN ENERGY DELIVERY OF INDIANA, INC.

By:

Scott E. Albertson Vice President Regulatory Affairs & Gas Supply

Dated: February 22, 2017

#### SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a VECTREN ENERGY DELIVERY OF INDIANA, INC. VECTREN SOUTH

#### TRANSMISSION, DISTRIBUTION, AND STORAGE SYSTEM IMPROVEMENT CHARGE (TDSIC)

**Distribution and Transmission Revenue Allocations** 

			[A]		[B]		[C]		[D]		[E]		[F]		[G]
	Revenue Requirement Allocation - Rate Case														
												Μ	liscellaneous		
	Rate Schedule		Distribution	Т	ransmission		Production		Other		Fuel		Revenue		Total
1	Rate RS	\$	28,733,094	\$	23,321,294	\$	106,159,155	\$	11,372,278	\$	58,049,784	\$	(14,875,868)	\$	212,759,738
2	Rate B	\$	549,085	\$	71,249	\$	372,715	\$	239,627	\$	481,077	\$	(251,720)	\$	1,462,032
3	Rate SGS	\$	2,013,649	\$	996,472	\$	4,540,181	\$	892,990	\$	2,481,333	\$	(1,439,585)	\$	9,485,040
4	Rate DGS/MLA	\$	11,076,023	\$	14,952,070	\$	69,237,519	\$	1,946,065	\$	45,104,753	\$	(2,873,219)	\$	139,443,211
5	Rate OSS	\$	1,141,031	\$	1,158,980	\$	5,434,583	\$	214,675	\$	3,917,839	\$	(575,308)	\$	11,291,801
6	Rate LP	\$	5,169,575	\$	9,214,763	\$	46,316,827	\$	1,043,341	\$	54,105,867	\$	4,047,372	\$	119,897,745
7	Rate HLF	\$	41,048	\$	4,998,284	\$	25,602,960	\$	503,917	\$	33,571,145	\$	6,737	\$	64,724,092
8	Rate OL/SL	\$	439,069	\$	-	\$	135,285	\$	2,541,695	\$	860,155	\$	26,214	\$	4,002,418
9	Miscellaneous Revenue	\$	-	\$	-	\$	-	\$	-	\$	12,440,364	\$	15,935,377	\$	28,375,741
10	Total	\$	49,162,574	\$	54,713,114	\$	257,799,226	\$	18,754,587	\$	211,012,317	\$	-	\$	591,441,818

#### Large Customer Migration

								Μ	iscellaneous		
11 Rate Schedule	Dist	tribution	Τı	ransmission	Production	Other	Fuel		Revenue	Total	
12 Rate RS										\$ -	
13 Rate B										\$ -	
14 Rate SGS										\$ -	
15 Rate DGS/MLA										\$ -	
16 Rate OSS										\$ -	
17 Rate LP	\$	38,147	\$	4,645,032	\$ 23,793,477	\$ 468,303	\$ 29,883,645	\$	-	\$ 58,828,603	
18 Rate HLF	\$	(38,147)	\$	(4,645,032)	\$ (23,793,477)	\$ (468,303)	\$ (29,883,645)	\$	-	\$ (58,828,603)	
19 Rate OL/SL										\$ -	
20 Miscellaneous Revenue										\$ -	
21 Total	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-	\$ -	

#### **Revenue Requirement Allocation - Adjusted**

						Miscellaneous											
22	Rate Schedule	[	Distribution	Т	ransmission		Production		Other		Fuel		Revenue	Total	Distribution	Transmission	22
23	Rate RS	\$	28,733,094	\$	23,321,294	\$	106,159,155	\$	11,372,278	\$	58,049,784	\$	(14,875,868)	\$ 212,759,738	58.44%	<b>42.62</b> %	<b>2</b> 3
24	Rate B	\$	549,085	\$	71,249	\$	372,715	\$	239,627	\$	481,077	\$	(251,720) \$	\$ 1,462,032	1.12%	6 0.13%	<b>2</b> 4
25	Rate SGS	\$	2,013,649	\$	996,472	\$	4,540,181	\$	892,990	\$	2,481,333	\$	(1,439,585)	\$ 9,485,040	4.10%	% <b>1.82</b> %	<b>2</b> 5
26	Rate DGS/MLA	\$	11,076,023	\$	14,952,070	\$	69,237,519	\$	1,946,065	\$	45,104,753	\$	(2,873,219)	\$ 139,443,211	22.53%	<b>6</b> 27.33%	<b>a</b> 26
27	Rate OSS	\$	1,141,031	\$	1,158,980	\$	5,434,583	\$	214,675	\$	3,917,839	\$	(575,308)	\$ 11,291,801	2.32%	<b>6 2.12%</b>	<b>3</b> 27
28	Rate LP	\$	5,207,722	\$	13,859,795	\$	70,110,304	\$	1,511,644	\$	83,989,512	\$	4,047,372	\$ 178,726,348	10.59%	<b>6 25.33%</b>	<b>3</b> 28
29	Rate HLF	\$	2,901	\$	353,253	\$	1,809,484	\$	35,614	\$	3,687,500	\$	6,737	\$ 5,895,489	0.01%	6 0.65%	<b>2</b> 9
30	Rate OL/SL	\$	439,069	\$	-	\$	135,285	\$	2,541,695	\$	860,155	\$	26,214	\$ 4,002,418	0.89%	6 0.00%	<b>3</b> 0
31	Miscellaneous Revenue	\$	-	\$	-	\$	-	\$	-	\$	12,440,364	\$	15,935,377	\$ 28,375,741	0.00%	6 <b>0.00</b> %	<b>3</b> 1
32	Total	\$	49,162,574	\$	54,713,114	\$	257,799,226	\$	18,754,587	\$	211,012,317	\$	- 3	\$ 591,441,818	100.00%	۶ <b>۵۵.00%</b> ۵	32