VERIFIED DIRECT TESTIMONY OF BENJAMIN FELTON

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

A1. My name is Benjamin Felton and my business address is 801 East 86th Avenue, Merrillville, Indiana 46410. I am employed by Northern Indiana Public Service Company LLC (“NIPSCO” or “Company”) as Senior Vice President, NIPSCO Electric.

Q2. Please describe your educational background.

A2. I hold a Bachelor of Science in Business Management from University of Phoenix and a Masters of Business Administration from Gainey School of Business - Spring Arbor University. I am a graduate of the University of Wisconsin-Madison CE Utility Institute program and have completed several other executive leadership programs.

Q3. What are your responsibilities as Senior Vice President, NIPSCO Electric?

A3. I am responsible for all aspects of Electric Operations for NIPSCO. In my current role, I have responsibility for the NIPSCO generating fleet as well as the transmission and distribution operations. This not only includes the
operating functions but a number of the support organizations as well. I am responsible for ensuring the safe and reliable production and delivery of electric energy to NIPSCO’s customers.

Q4. Please provide a summary of your professional experience.

A4. Prior to joining Northern Indiana Public Service Company, I spent nearly 25 years at Consumers Energy Company (CE) in Jackson, Michigan. Over the course of my service to CE and its 1.8 million electric customers, I held multiple leadership roles during my tenure and concluded my affiliation as Executive Director of Electric System Operations and Maintenance. I also held roles as Executive Manager of Network Services, Substation Maintenance Manager, Substation Operations Manager and Senior Field Leader. During my career at CE I was able to bring a strong emphasis to employee and public safety, achieving reductions in recordable incidents of twenty-six percent for at three (3) consecutive years, which can be attributed to strong organizational commitment to positive safety culture and personal ownership. In addition, I also lead my teams to achieve Customer Average Interruption Duration Index (CAIDI) reductions of 26% since 2010.
I joined NIPSCO in December of 2015 as Vice President of Power Delivery. In that role, I was responsible for leadership of 600 NIPSCO electric employees engaged in delivering safe and affordable power to our customers. I was also responsible for oversight of all areas of Transmission and Distribution (T&D) including; strategic planning, budget planning, resource and workforce scheduling, outage restoration, system reliability and collaborative completion of the electric Transmission, Distribution, and Storage System Improvement Charge (TDSIC). I was promoted to my current position of Senior Vice President, NIPSCO Electric on October 16, 2018.

Q5. Have you previously testified before this or any other regulatory commission?
A5. No.

Q6. Are you sponsoring any attachments to your testimony in this Cause?
A6. No.

Q7. What is the purpose of your testimony?
A7. The purpose of my testimony is to (1) describe steps NIPSCO has taken to control costs, (2) describe NIPSCO’s generation fleet, (3) describe NIPSCO’s
electric transmission and distribution systems; (4) discuss the Company’s
customer service and electric reliability programs; (5) describe the
significant investments NIPSCO has made to its generation and
transmission and distribution systems in recent years; and (6) explain
various pro-forma expense adjustments.

Q8. **Has NIPSCO made significant investments in its electric facilities that is
driving the relief sought in this case?**

A8. Yes. Approximately three years have passed since the test year used to
establish NIPSCO’s current rates. During that time period, NIPSCO has
invested significantly in its infrastructure related to its jurisdictional electric
operations. NIPSCO’s Net Utility Plant has grown by approximately $360
million or 12% over the last 3 years and is projected to grow by another $520
million by the end of the 2019 future test year.

As discussed below, NIPSCO has taken steps to control costs resulting in
decreases to its operation and maintenance (“O&M”) expenses, but in spite
of these efforts, increases in depreciation and amortization expense
associated with the investment in new plant are projected to counter those
savings.
Q9. How has NIPSCO taken steps to control its costs?

A9. NIPSCO closely monitors its capital expenditures and operating expenses. On an annual basis, the manager in charge of each department or cost center is required to prepare and submit a proposed operating budget which includes a proposed level of capital expenditures and operating expenses. Each operating budget is reviewed by management in order to ensure the submitted expenditures are reasonable and necessary. Once approved by management, each manager is responsible for monitoring their budget and ensuring the costs are spent within approved limits. The budgets and actual expenditure variances are reviewed throughout the year to ensure that funds are being spent appropriately and in accordance with approved levels. This process ensures that controls are in place to identify, monitor and control costs.

NIPSCO’s Generation Fleet

Q10. Are you generally familiar with NIPSCO’s generating facilities?

A10. Yes.

Q11. Please generally describe NIPSCO’s generation fleet.

A11. The NIPSCO generating facilities have a total installed capacity of 2,825 megawatts (“MW”) and consist of six (6) separate generation sites,
including the R.M. Schahfer Generating Station (“Schahfer”) (Units 14, 15, 16A, 16B, 17 and 18), Michigan City Generating Station (“Michigan City”) (Unit 12), Bailly Generating Station (“Bailly”) (Unit 10), Sugar Creek Generating Station (“Sugar Creek”) (SC1, SC2, and SS1) and two (2) hydroelectric generating sites near Monticello, Indiana. Of the total capacity, 73.3% is from coal-fired units, 26.3% is from natural gas-fired units and 0.4% is from hydroelectric units. Figure 1 illustrates the installed capacity and plant locations of NIPSCO’s coal and gas-fired generation units.

**Figure 1. Installed capacity of non-hydro generating units (MW)**

<table>
<thead>
<tr>
<th></th>
<th>Bailly (10)</th>
<th>Sugar Creek (1-3)</th>
<th>Mich. City (12)</th>
<th>14a</th>
<th>15a</th>
<th>16a</th>
<th>16b</th>
<th>17</th>
<th>18</th>
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</thead>
<tbody>
<tr>
<td>gas (CT)</td>
<td>31</td>
<td>165</td>
<td>165</td>
<td>205</td>
<td>431</td>
<td>472</td>
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<tr>
<td>gas (CCGT)</td>
<td>165</td>
<td>165</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>coal</td>
<td></td>
<td></td>
<td>469</td>
<td>431</td>
<td>472</td>
<td>361</td>
<td>361</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q12. What changes has NIPSCO made to its generation fleet since its last electric rate case in Cause No. 44688 (“44688 Electric Rate Case”)?
A12. In its 44688 Electric Rate Case, NIPSCO advised the Commission of its plan to retire Bailly Units 7 and 8, with the Unit 10 combustion turbine remaining in operation. Bailly Units 7 and 8 were retired on May 31, 2018.

Q13. What investments has NIPSCO made to its generation fleet since the 44688 Electric Rate Case?

A13. NIPSCO has made significant investments to its generation fleet to comply with federal environmental regulations since the 44688 Electric Rate Case. By its December 13, 2017 Order in Cause No. 44872, the Commission granted NIPSCO a Certificate of Public Convenience and Necessity (“CPCN”) for its Environmental Compliance Project on December 13, 2017 in Cause No. 44872. The Environmental Compliance Plan consists of the following capital projects currently being recovered through the Federally Mandated Cost Adjustment (“FMCA”) tracker filings in Cause No. 44340-FMCA-XX (“FMCA Tracker”):
### Environmental Compliance Project

<table>
<thead>
<tr>
<th>Project</th>
<th>In-Service Date (* Actual)</th>
<th>Direct Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bailly Generating Station</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Water Monitoring</td>
<td>10/19/2017*</td>
<td>$350,000</td>
</tr>
<tr>
<td><strong>Michigan City Generating Station</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Water Monitoring</td>
<td>10/19/2017*</td>
<td>$350,000</td>
</tr>
<tr>
<td>Remote Ash Conveying</td>
<td>11/19/2018</td>
<td>$60,671,378</td>
</tr>
<tr>
<td>Material Management Area</td>
<td>11/19/2018</td>
<td>$1,500,000</td>
</tr>
<tr>
<td><strong>R. M. Schahfer Generating Station</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Water Monitoring</td>
<td>10/19/2017*</td>
<td>$750,000</td>
</tr>
<tr>
<td>Remote Ash Conveying (U14 &amp; U15)</td>
<td>12/16/2018</td>
<td>$85,815,727</td>
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<tr>
<td>Material Management Area</td>
<td>11/30/2018</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Process and Storm Water Pond</td>
<td>6/30/2022</td>
<td>$5,400,000</td>
</tr>
<tr>
<td>Landfill-Pond Closure</td>
<td>12/30/2018</td>
<td>$3,704,855</td>
</tr>
</tbody>
</table>

At the end of the Forward Test Year, with the exception of the Process and Storm Water Pond project at Schahfer, all of the Environmental Compliance Projects will have been placed in-service as shown in the table above.

By its October 10, 2013 Order in Cause No. 44311, the Commission granted NIPSCO a CPCN for its Mercury and Air Toxics Standards ("MATS") Compliance Plan. The MATS Compliance Plan includes the following capital projects currently being recovered through the Environmental Cost Recovery Mechanism ("ECR") tracker filing in Cause No. 42150-ECR-XX

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(“ECR Tracker”):²

<table>
<thead>
<tr>
<th>Unit</th>
<th>Project</th>
<th>Actual In service Date</th>
<th>Direct Capital³</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Fuel additives</td>
<td>12/8/2015</td>
<td>$483,240</td>
</tr>
<tr>
<td>8</td>
<td>Fuel additives</td>
<td>12/8/2015</td>
<td>$797,760</td>
</tr>
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<td>12</td>
<td>ACI</td>
<td>4/8/2016</td>
<td>$4,301,155</td>
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<tr>
<td>12</td>
<td>Fuel additives</td>
<td>12/20/2015</td>
<td>$734,850</td>
</tr>
<tr>
<td>14</td>
<td>ACI</td>
<td>7/31/2015</td>
<td>$4,192,019</td>
</tr>
<tr>
<td>14</td>
<td>Fuel additives</td>
<td>12/10/2015</td>
<td>$672,068</td>
</tr>
<tr>
<td>15</td>
<td>Fuel additives</td>
<td>12/10/2015</td>
<td>$621,567</td>
</tr>
<tr>
<td>7/8</td>
<td>Permeation Source</td>
<td>7/30/2015</td>
<td>$13,333</td>
</tr>
<tr>
<td>12</td>
<td>Permeation Source</td>
<td>7/31/2015</td>
<td>$13,333</td>
</tr>
<tr>
<td>14</td>
<td>Permeation Source</td>
<td>7/30/2015</td>
<td>$13,333</td>
</tr>
<tr>
<td>15</td>
<td>Permeation Source</td>
<td>7/30/2015</td>
<td>$13,333</td>
</tr>
<tr>
<td>18</td>
<td>Permeation Source</td>
<td>8/13/2015</td>
<td>$13,333</td>
</tr>
</tbody>
</table>

All of the MATS Compliance Projects have been placed in-service as shown in the table above.

By its January 4, 2002 Order in Cause No. 42150, the Commission granted NIPSCO a CPCN for its NOx Compliance Plan. The NOx Compliance Plan includes the following capital projects currently being recovered through the ECR Tracker:⁴

² The Permeation Source projects were approved in Cause No. 42150-ECR-26.
³ Approved capital costs in Cause No. 42150-ECR-31.
⁴ The Unit 7 3rd SCR Catalyst Layer, Unit 12 SCR Catalyst 1st Layer, and Unit 14 SCR
At the end of the Forward Test Year, all of the NOx Compliance Projects will have been placed in-service as shown in the table above.

By its September 5, 2012 Phase III Order in Cause No. 44012, the Commission granted NIPSCO a CPCN for its Multi-Pollutant Compliance Plan (“MPCP Compliance Plan”). The MPCP Compliance Plan includes the following capital project currently being recovered through the ECR Tracker:

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5 Approved capital costs in Cause No. 42150-ECR-31.

6 The Unit 7 3rd SCR Catalyst Layer, Unit 12 SCR Catalyst 1st Layer, and Unit 14 SCR Catalyst 1st Layer were approved in Cause No. 42150-ECR-24. The Unit 12 SCR Catalyst 2nd Layer was approved in Cause No. 42150-ECR-28. Unit 12 SCR Catalyst 3rd Layer and Unit 14 SCR Catalyst 2nd Layer were approved in Cause No. 42150-ECR-29.
| Unit | Project                     | In service Date (* Actual) | Direct Capital  

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<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>FGD Facility Addition</td>
<td>12/15/2015*</td>
<td>$255,000,000</td>
</tr>
</tbody>
</table>

1. All of the MPCP Compliance Projects have been placed in-service as shown in the table above.

2. In addition to the environmental investments made to its generation fleet, NIPSCO made the following significant investments since the 44688 Electric Rate Case:

### 2016 In Service

<table>
<thead>
<tr>
<th>Unit</th>
<th>Project</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schahfer</td>
<td>Unit 18 Turbine, Valves, Generator and Auxiliaries</td>
<td>$7.2M</td>
</tr>
</tbody>
</table>

### 2017 In Service

| Schahfer | Unit 15 Turbine, Valves, and Auxiliaries Overhaul | $21.7M |
| Schahfer | Unit 15 Finishing Super Heat Superheat Replacement | $9.2M |
| Schahfer | Unit 15 Economizer Header Replacement             | $1.1M  |
| Schahfer | Unit 17 Turbine Valve and Auxiliaries Overhaul    | $2.8M  |

### 2018 In Service / Forecast

| Bailly | Unit 8 Conversion to Synchronous Condenser       | $16.6M |
| Schahfer | Unit 18 Turbine Overhaul                        | $3.8M  |

### 2019 Forecast

| Schahfer | Unit 14 West TDBFP Overhaul                    | $2.79M |
| Schahfer | Unit 14 Reheat Lower Loop Replacement          | $3.05M |

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7 Approved capital costs in Cause No. 42150-ECR-31.
**Q14. In your opinion, is all of NIPSCO’s environmental compliance equipment used and useful in the generation of electricity to NIPSCO’s retail electric customers?**

**A14. Yes.** All of NIPSCO’s generating units were operated during 2017. The environmental equipment added as discussed above (all of which have been preapproved by the Commission) has or will assist NIPSCO in meeting increasingly stringent air emissions requirements.

**Q15. Please describe the improvements that have been made at the Sugar Creek Generating facility and the subsequent impact to the customer.**

**A15.** In the fourth quarter of 2018, Sugar Creek will complete the Dry Low-NOx 2.6+ upgrade to the two gas turbines (SC1 and SC2), as well as the upgrade to the control system that includes optiflex and auto-tune controls. These upgrades will complete the upgrades to the entire plant control system.
These modifications will allow for a longer period of time between outages (from a two year outage cycle to a four year outage cycle) on the gas turbines. These upgrades will also eliminate the need for seasonal tuning on the gas turbines, resulting in reduced O&M expenses. These upgrades, as well as the replacement of the steam turbine rotor, will result in a higher availability for the station. These modifications directly address a large portion of the Equivalent Forced Outage Rate ("EFOR") events that have recently occurred, as discussed below.

Q16. Please discuss the retirement of Bailly Units 7 and 8 on May 31, 2018.

A16. Both Units 7 and 8 at Bailly were successfully retired from service on May 31, 2018. Leading up to the retirement date, Bailly operated for 1,200 consecutive days with no safety incidents. Upon retirement, the final phase of conversion of Unit 8 to a synchronous condenser was completed. This conversion was necessary to support voltage due to a lack of rotating generation in the lower Lake Michigan area. The synchronous condenser is currently in-service and operating.

Q17. What is the purpose of a synchronous condenser?
The purpose of a synchronous condenser is to provide continuous Volt-Ampere Reactive ("VAR") support to an electric transmission grid. The total transmission system capacity is made up of active power, megawatts, and reactive power, megavars ("MVARs"). The MVARs are required to maintain system voltage when atypical operations are present (such as starting large motors or arc furnaces), and to improve the system power factor. Unlike other forms of VAR support, the amount of reactive power from a synchronous condenser can be continuously adjusted. A synchronous condenser does not convert electric power to mechanical power or vice versa, but adjusts VARs according to conditions on the electric power transmission grid (i.e., riding out short circuit events, starting of electric arc furnaces, etc.). The installation and operation of a synchronous condenser is identical to that for large electric motors and generators. The magnetic field surrounding the rotating element is controlled by a voltage regulator to either generate or absorb reactive power as needed to adjust the electric transmission grid voltage, or to improve power factor. Most synchronous condensers connected to electrical grids are rated between 20 MVAR and 200 MVAR and many are
hydrogen cooled. The synchronous condenser at Bailly is rated at up to 300 MVAR and is hydrogen cooled.

Q18. Please summarize the reliability metrics associated with the NIPSCO generating units over the past three years.

A18. Figure 2 illustrates that the reliability of NIPSCO’s generating units, exclusive of Units 7 and 8, as measured by the Equivalent Forced Outage Rate ("EFOR"), has increased relative to the 44688 Electric Rate Case. The Company’s average EFOR for the three year period ending December 31, 2017 is 10.6%, an increase from the preceding three year period. This increase in EFOR had contributing factors rooted in the limited run time for the coal units during this period due to economic dispatch into MISO.

Figure 2. NIPSCO’s EFOR (for coal-fired generating units)

Q19. Please summarize the reliability metrics associated with Sugar Creek.
A19. The EFOR for Sugar Creek has been below 2.5% for each of the past three years and below 1% in 2016. In fact, Sugar Creek has won awards for its superior performance. Sugar Creek received national recognition in 2012, receiving the Pacesetter of the Year from Combined Cycle Journal. The award was for “delivering on operational excellence.” As of June 2018, the plant has achieved an 84% net capacity factor (“NCF”) and has exceeded 45% NCF every year since 2011, which is higher than NIPSCO expected when it purchased the facility in May 2008. The operating profile for Sugar Creek has changed dramatically since 2010. When NIPSCO bought Sugar Creek, the plant had not had a NCF greater than 10% for any previous year, and the NCF for 2008 was only 3.4% on 45 operating days. The NCF increased to 14.8% in 2009, and in 2010, the Midcontinent Independent System Operator, Inc. (“MISO”) cycled Sugar Creek regularly with 167 starts and a 31.6% NCF. MISO continues to operate Sugar Creek at an elevated NCF, and Sugar Creek had net capacity factors of 68%, 78%, and 74% from 2015 through 2017, respectively, due largely to lower natural gas prices and the facility’s operational flexibility with Sugar Creek regularly dispatched by MISO even during off-peak periods. Sugar Creek’s safety
record is also excellent, and there has never been a lost time incident at Sugar Creek.

Q20. Please explain how EFOR measures unit reliability.

A20. A generating unit’s EFOR is equal to the hours of unit failure (unplanned outage hours and equivalent unplanned derated hours) given as a percentage of the total hours of the availability of that unit (unplanned outage, unplanned derate, and service hours). For example, if MISO anticipated a unit to be available to run 3,000 hours in a certain year but the unit was unable to run 300 of those hours due to unexpected problems, the unit’s EFOR for the year would be 10%. Therefore, a low EFOR number is desirable.

Q21. Are these reliability metrics in line with industry metrics?

A21. Yes. The EFOR of NIPSCO’s coal units was 9.79% in 2017, below the 2017 U.S. average of 10.92% for similarly sized units, 300 - 599MW. During the three year period 2015 – 2017, NIPSCO’s average EFOR was 10.63%, still slightly lower than the 2017 national average.

Q22. Does NIPSCO expect reliability metrics to remain in-line with industry standards?
A22. With recently announced coal plant retirements, there is the potential for EFOR to move upward over the near to medium term. NIPSCO will continue to operate its facilities in a safe, environmentally compliant manner and with a reasonable level of reliability, while making sound decisions with regard to significant capital investments into facilities with limited operating lives. The cost impact to our customers is always a key component to any prudent investment decisions we make and will continue to be through this transition period. Our performance initiatives are directly tied to reliability metrics (EFOR and EAF), safety metrics (OSHA recordables, DART, and Preventable Auto collisions), customer economics, and staying within our operation budget, and targets for these metrics are part of my performance expectations, and those of my leadership team.

Q23. Do reductions in the dispatch of NIPSCO’s coal units impact the cost to operate those units?

A23. Yes. NIPSCO’s coal units were engineered to be used as base load units that run consistently over long periods of time, and they were not designed to ramp up and down in response to short term market signals. As those units become less economical, the cost to operate them increases because in addition to the increased maintenance required of older units, the added
expenses to ramp the units up and down are incurred more frequently.

NIPSCO must remain mindful of how that added expense to customers balances against the impact on reliability. In spite of the cost control efforts NIPSCO has undertaken as I have referenced above, the operational characteristics of these plants dictate that some increases in costs cannot be avoided when the plants are operated outside of the parameters for which they were designed.

**Base Cost of Fuel and Coal Inventory Levels**

**Q24.** What was the level of fuel expense in the Historic Base Period?

A24. The adjusted retail jurisdictional cost of fuel in the Historic Base Period reported in Petitioner’s Exhibit No. 4, Attachment 4-B-S2, FP Module was $494,884,095 (Line 1, Column A).

**Q25.** Were NIPSCO’s retail jurisdictional fuel costs during the Historic Base Period reasonable?

A25. Yes. NIPSCO made (and continues to make) every reasonable effort to acquire fuel so as to provide electricity to its retail customers at the lowest fuel cost reasonably possible. As NIPSCO regularly explains in its quarterly fuel adjustment charge proceedings, NIPSCO purchases fuel (coal) pursuant to long-term contracts entered into using competitive bidding and
on the spot markets. For gas-fired generators (combustion turbines and Sugar Creek) NIPSCO purchases natural gas pursuant to supply contracts that are entered into using a competitive bidding process. Historically, the natural gas supply contracts have been seasonal or annual in duration, ensure firm delivery of natural gas to the generator, and have competitive pricing options based upon prevailing market conditions. NIPSCO considers a number of factors in making fuel procurement decisions, including price, quality, suitability, environmental attributes, supplier availability, reliability, and diversity. Market factors also affect fuel purchases.

Q26. **What was the coal inventory level in the Historic Base Period?**

A26. The retail jurisdictional coal inventory level reported in Petitioner’s Exhibit No. 4, Attachment 4-B-S2, RB Module for the Historic Base Period was $80,046,953 (Line 16, Column A)

Q27. **Is this coal inventory level reasonable?**

A27. Yes, this coal inventory level is consistent with our fuel inventory strategy, which was provided as part of the Minimum Standard Filing Requirements. NIPSCO’s fuel inventory strategy is designed to balance the costs
associated with maintaining coal inventory with the need to provide a level
of assurance that when needed, during periods of high demand, extreme
weather, or fuel transportation or mine production problems, NIPSCO will
be able to call on its generating units and have adequate fuel supplies on
hand.

**NIPSCO's Safety Culture**

**Q28. Please describe NIPSCO’s safety culture.**

**A28.** NIPSCO's safety culture has steadily improved over the past decade. In
2010, NIPSCO hired an outside consultant to review not only the
Company's policies and historical safety performance, but also the safety
culture. This consultant spent time reviewing all documents, historical
safety metrics, and made numerous visits across our service territory to
gain a holistic view of the Company's state of employee safety. The
consultant then delivered a "state of the business" report for individual
operational areas within the Company and packaged together a plan for
how to deliver human performance based error reduction into the fabric of
the Company. This journey has been ongoing for almost nine full years
now and we are continuing to see the benefits of improved safety culture
and safety performance metrics. In the past year, NIPSCO has engaged
other consultants who are utility industry experts in safety regulations to
work with our internal teams to review and refine our internal work
practices, safety manuals, and safety policies/procedures while ensuring
alignment with industry standards and best practices.

To continue building a stronger safety culture, in the past three years,
NIPSCO has participated in the National Safety Council’s “Journey to
Safety Excellence” program. Our work within the realms of human
performance, just culture and performance management as part of our
aforementioned approach aligned well with the program and allowed us to
continue to grow our culture across the NIPSCO footprint. As part of the
program, NIPSCO undertakes an annual employee survey that is focused
only on safety culture and is benchmarked against over 800 other survey
participants from across the globe. Following the survey period, local
safety team’s work together to build action plans focused on improving
safety performance and ultimately safety culture in low scoring areas. This
has resulted in a significant improvement in how our employees perceive
our safety efforts.

In addition, NIPSCO continues to collaboratively work with our front line
employees to develop rules and policies for stronger work practices. We
have developed a number of in-house safety training programs to improve
our driving performance and we continually monitor regulatory changes
and requirements to manage our safety training on a continual
improvement basis.

NIPSCO’s safety culture also reaches into our contractors and construction
execution teams as well, and NIPSCO has provided strong support to all of
our contractor teams with an example being our cooperative contractor
safety committees (CCSCs) for both our generation and field operations
teams. These committees are run by our contractors - with NIPSCO support
- and involve leaders from each of NIPSCO’s major contractor teams. We
view our relationship with our contracted business partners the same way
we view our relationships with our own employees. This focus on
cooperation and safety has resulted in very strong safety performance from
our contracted teams as well.

Q29. Have NIPSCO’s safety metrics improved in recent years?
A29. Yes. Overall, NIPSCO has made an 80% improvement in recordable injury
rate, an 83% improvement in DART (days away, restriction or transfer)
injury rate, and a 71% improvement in vehicle crash rate from year end 2008 to year end 2017. On the electric operations side of the business, NIPSCO has seen a 66% improvement in recordable injury rate, a 72% improvement in DART (days away, restriction or transfer) injury rate, and a 71% improvement in vehicle crashes from year end 2008 to year end 2017.

<table>
<thead>
<tr>
<th>Year</th>
<th>OSHA Rate</th>
<th>DART Rate</th>
<th>Crash Rate</th>
</tr>
</thead>
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<tr>
<td>2008</td>
<td>3.72</td>
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<td>6.35</td>
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<tr>
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<td>2016</td>
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<td>0.61</td>
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<tr>
<td>2017</td>
<td>0.75</td>
<td>0.33</td>
<td>1.84</td>
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</tbody>
</table>

^^ Includes all NIPSCO operations
Q30. Does NIPSCO’s focus on safety benefit customers?

A30. Yes. NIPSCO’s focus on safety helps customers in a variety of ways, namely in ensuring a healthier, more productive workforce, while keeping our public as safe as possible. By keeping employees safer, we are lowering costs for overtime or contracted work to replace an injured work force. We are reducing hidden costs by preventing tired or less experienced employees from having to replace more experienced employees when they are injured. All other factors remaining constant, this reduces our operating costs.

From a public safety standpoint, our continued focus on driving safety makes our employee-drivers a much safer member of the on-road
community while traveling throughout our service territory. On the safety
side, our focus on safety procedures and rules results in our front line teams
working with as little risk as possible, which is a boon when working with
dangerous energy, such as electric distribution/transmission circuits. We
continue to focus not only on appropriate training for employees, but also
on giving them the right tools and protective equipment to do their job.

**NIPSCO’s Electric Transmission and Distribution Systems**

Q31. Please describe NIPSCO’s electric transmission system.

A31. The NIPSCO electric transmission system consists of approximately 353
circuit miles of 345 kV, 756 circuit miles of 138 kV and 1,693 circuit miles of
69 kV transmission lines. In addition, NIPSCO has 61 transmission
substations. NIPSCO is interconnected with six neighboring utilities. The
Company has transmission interconnects with American Electric Power or
its affiliates, at the 345 kV, 138 kV, and 69 kV operating voltages. NIPSCO
also interconnects with Commonwealth Edison at 345 kV and 138 kV and
with Duke Energy Indiana at 345 kV, 138 kV and 69 kV. NIPSCO has a
single 138 kV interconnection with both Ameren and International
Transmission Company (“ITC”) and a single 765kV interconnection with
Pioneer Transmission.
Q32. Please provide an overview of the NIPSCO electric distribution system.

A32. NIPSCO serves more than 468,000 customers in Northern Indiana, primarily through more than 900 distribution circuits. These circuits operate at a nominal voltage of 34.5 kV, 12.5 kV, and 4 kV, and radiate from approximately 240 distribution substations. There are approximately 8,209 miles of overhead line, with about 2,532 miles of underground cable.

Transmission and Distribution Investment

Q33. Please identify the significant investments NIPSCO has made in its transmission and distribution system since the 44688 Electric Rate Case.

A33. Since the 44688 Electric Rate Case, NIPSCO has made numerous investments in its transmission and distribution system, including:

(a) Investment in an Enhanced Outage Management System ("EOMS") to improve NIPSCO customers’ experience by providing for faster restoration and more accurate communication of estimated time of restoration during planned and unplanned outages. Overall, the EOMS will serve as the foundational platform to drive dependable, predictable, timely service and emergency response. This solution is targeted to go live at the end of the first quarter in 2019.
(b) Ind. Code Ch. 8-1-39 allowed for the implementation of an electric "TDSIC" (transmission, distribution, and storage system improvement charge) plan in January 2016. Since the successful implementation, NIPSCO has made significant investments in infrastructure upgrades. Through May 31, 2018, NIPSCO investments total more than $283 Million in direct costs.

c) Close to completion of major multi value projects

d) In addition to the projects above, NIPSCO continues to strategically invest maintenance capital in projects that expand or increase system capacity. Investments also include enhancing Cyber Security to protect the Electric system from attack, reducing systemic risk.

Q34. What is the status of the MVP projects?

A34. Under the MISO Transmission Owners Agreement (“TOA”), NIPSCO is responsible for (or partially responsible for) constructing two MVP projects that connect to NIPSCO’s system: (1) Reynolds to Topeka 345kV, and (2) Reynolds to Greentown 765kV. These projects will be 100% complete as of the end of the December 31, 2019 Forward Test Year. A summary of the current status of these two MVP projects is as follows:
**Petitioner’s Exhibit No. 7**
Northern Indiana Public Service Company LLC
Page 29

**345kV Reynolds to Topeka**

1. Overall approximately 98% complete - Circuits 34528 and 34529 are both in service
2. 45% of Customer ROW sign off complete
3. Hiple Substation reactors have been installed and going through testing and commissioning.
4. Hiple NIPSCO/ AEP/ ITC tie-ins are slated for a November 1 start and tentatively scheduled to be completed by November 21.

**765kV Reynolds to Greenstown**

1. Overall, approximately 97% complete - 75% of Customer ROW sign off completed
2. Contractor is completing minor ROW work
3. The 765kV line is in service from Reynolds to Greenstown

**Q35. Are the MVP facilities included in NIPSCO’s jurisdictional rate base in this case?**

A35. No. NIPSCO Witness Shikany explains why the MVP facilities are not included in NIPSCO’s jurisdictional rate base.

**Q36. In your opinion, are all of NIPSCO’s transmission and distribution plant and equipment used and useful in the provision of electricity to NIPSCO’s retail electric customers?**

A36. Yes. NIPSCO’s transmission and distribution plant and equipment are essential to the reliable transport and delivery of electricity from NIPSCO’s
generation fleet (or from other generators) to its retail customers, in order
to meet customers’ needs for electric power.

Customer Service and Reliability

Q37. Please summarize the reliability metrics associated with NIPSCO’s
transmission and distribution system since the 44688 Electric Rate Case.

A37. NIPSCO monitors three main metrics to evaluate the reliability of the
transmission and distribution system: SAIFI, SAIDI and CAIDI. SAIFI is
the System Average Interruption Frequency Index and represents the
average number of times that a system customer experiences an outage
during the year. SAIDI is the System Average Interruption Duration Index
and represents the number of minutes a utility’s average customer did not
have power during the year. CAIDI is the Customer Average Interruption
Duration Index and represents the average time of an outage during the
year.

NIPSCO’s reliability indices, CAIDI, SAIDI, and SAIFI have improved since
the 44688 Electric Rate Case. Specifically considering the metrics from an
all-inclusive perspective, NIPSCO has demonstrated consistent
improvement from 2014 to 2017. By industry standard, reliability indices
are reported without including Major Event Days (“MED”), which are
primarily storms or severe weather events more destructive than typical storm events. Figure 3 illustrates the number of MED in NIPSCO’s service territory and the threshold that was used to identify major event days each year. NIPSCO believes that the decrease in MED in recent years is due to its vegetation management program. Additionally, NIPSCO implemented a comprehensive emergency restoration plan in 2017 that positively contributed to the downward trend in major event days.

Figure 3. NIPSCO’s Major Event Days Metrics

![Bar graph showing MED (days) from 2014 to 2017 with a line graph showing the threshold minutes.]

However, including MEDs in the reliability metrics provides a comprehensive view of the overall customer experience during outage
events. As depicted in Figure 4, NIPSCO achieved a 27% reduction in SAIFI, a 75% reduction in SAIDI, and a 65% reduction in CAIDI.

Figure 4: NIPSCO Reliability Metrics (Including MED)

Q38. Are NIPSCO’s transmission and distribution reliability metrics in-line with industry standards?

A38. Yes. Figure 5 shows that NIPSCO’s SAIFI has been lower (better) than the Institute of Electrical and Electronics Engineers (“IEEE”) industry median for medium-sized utilities over the past 5 years. Figure 6 shows that NIPSCO’s SAIDI has been below or slightly above the IEEE industry median for medium-sized utilities over the past 5 years. Finally, Figure 7
shows that NIPSCO’s CAIDI has been above the IEEE industry median for medium-sized utilities over the past 5 years.

**Figure 5. SAIFI (excluding Major Events)**

<table>
<thead>
<tr>
<th>Year</th>
<th>NIPSCO</th>
<th>Industry Median (IEEE)</th>
<th>Indiana IOU Average</th>
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</tr>
<tr>
<td>2015</td>
<td>0.87</td>
<td>0.84</td>
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<tr>
<td>2016</td>
<td>1.01</td>
<td>1.01</td>
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</tr>
<tr>
<td>2017</td>
<td>1.01</td>
<td>1.01</td>
<td>1.01</td>
</tr>
</tbody>
</table>
Figure 6. SAIDI (excluding Major Events)

![SAIDI Graph]

Figure 7. CAIDI (excluding Major Events)

![CAIDI Graph]
Q39. What types of maintenance programs are in place at NIPSCO to ensure electric system reliability?

A39. NIPSCO has put in place a comprehensive set of proactive substation, transmission, and distribution maintenance programs targeted at reliability. These include an active vegetation management program and capital investments aimed at enhancing system capabilities, improving reliability, and replacing aging infrastructure where needed. NIPSCO has also enhanced its transmission system maintenance program procedures and record systems to improve reliability, reduce mis-operations, and ensure compliance with North American Electric Reliability Corporation (“NERC”) standards.

NIPSCO is currently operating its wooden structure inspection program on a 10-year cycle. This program includes the treatment/life extension of poles meeting minimum strength requirements and replacement of those that do not meet those requirements. The pole program inspects approximately 30,000 wooden transmission and distribution poles per year, and replaces a minimum of 1,200 poles on an annual basis.

Other programs include the periodic inspections and maintenance of
transmission lines and structures, substation equipment, protective relay systems, and distribution pad-mount transformers, pole-mounted reclosers, voltage regulators, switched capacitors, and other underground equipment. These programs also include the remedial work necessary to repair or replace minor plant items found to be deficient from inspection criteria.

Q40. In addition to the maintenance programs described above, what other actions has NIPSCO undertaken to maintain customer service and reliability?

A40. In 2017, NIPSCO developed and implemented a robust emergency response plan providing for coordinated and comprehensive response for rapid restoration of electric service in the event of severe weather, or other system emergencies, by ensuring that all required corporate resources are utilized in the most effective manner.

In addition, NIPSCO began a formal Outage Investigation Program that reviews any outages that impact more than 1,000 customers, result in a pole fire or similar safety-related event, or have an outage cause code of “unknown.” The findings are reported out through the organization.
Lineman, Substation Electricians, Supervisors, Dispatchers, and Engineers all benefit from these report findings by applying these lessons learned to their designs, materials, and construction methods to improve reliability.

Part of this program was the review and update of the outage cause codes that identify the true outage root cause. This allows NIPSCO to more accurately perform analytics on its outage causes and make improved decisions on materials, designs, construction methods, and maintenance techniques.

NIPSCO maintains a Line & Sub voltage regulator maintenance replacement program to reduce in service failures leading to enhanced customer reliability. Newer design regulators incorporate enhanced tap changers that reduce contact wear and thus premature failure. Microprocessor based controls have been more reliable than analog controls, with the added benefit of enhanced customer voltage profile.

NIPSCO continues to perform its "Worst Circuits" and "Worst Taps" Programs to better improve electric system reliability. The "Worst Circuits" Program includes calculating the CAIDI, SAIDI, SAIFI, and Customer Duration Hours annually for each circuit and determining an overall
performance value for each Circuit. The circuits with the worst performance values are then assessed and recommendations for improvement are developed. The "Worst Taps" Program includes identifying all taps that have experienced multiple outages in the previous year and developing recommendations for improvement. Recommendations for improvement for both the "Worst Circuits" and "Worst Taps" Programs include targeted tree trimming, replacement of equipment prone to failure, replacement of equipment that is in poor condition, an analysis of fuse coordination and loading, and installing additional sectionalizing devices (Cut-Outs, Triple-Shots, Reclosers, Switches, etc.) where appropriate to minimize the impacts of outages and the number of customers affected per outage.

Another action NIPSCO has undertaken to maintain customer service is its recent deployment of Green Roads. The Green Roads initiative (1) reduces the number of accidents and total claims cost by enabling both in-vehicle driver feedback and ongoing trending analysis, and (2) reduces emergency and outage response through closest vehicle to trouble identification by providing usage and diagnostic data and improving preventative maintenance. NIPSCO has a large investment in its fleet of vehicles. Green
Roads allows NIPSCO to monitor gas consumption and maintenance needs. Keeping vehicles in a ‘ready to roll’ status enables both our Driver Safety and Emergency /Outage Response goals.

NIPSCO has also invested in an Enhanced Outage Management System (“EOMS”) to improve customer experience by providing for faster restoration and more accurate communication of estimated time of restoration during planned and unplanned outages. Overall, the EOMS will serve as the foundational platform to drive dependable, predictable, timely service and emergency response. This solution is targeted to go live at the end of the first quarter in 2019.

Finally, NIPSCO’s Mobile user application was enhanced to include the outage cause when the estimated time of restoration is updated to enhance customer experience. All electric customers that have supplied NIPSCO with an email address were auto-enrolled to receive power outage email alerts. This information allows NIPSCO to inform customers on the duration of the outage so customers can plan their day accordingly.

**Q41.** How are customer service and reliability goals incorporated into NIPSCO’s planning process?
A41. NIPSCO prepares an annual operating plan to outline long term and near
term operational goals, plans and performance targets. Key elements of this
plan include a focus on service and reliability improvements. Performance
targets are established that represent stretch levels of continuous
improvement and initiatives are then outlined to achieve the performance
targets. These performance targets and initiatives are then cascaded
throughout our organization in an aligned and increasingly more specific
manner, becoming a core part of our annual performance management
process. Our performance initiatives are directly tied to reliability metrics
(CAIDI, SAIFI, SAIDI), safety metrics (OSHA recordables, DART, and
Preventable Auto Crashes), and staying within our operation budget, and
targets for these metrics are part of my performance expectations, and those
of my leadership team.

**Pro-Forma Expense Adjustments**

Q42. Please describe Adjustments OM 2A-17, and 2A-18 non-labor Storm
normalization shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2,
OM 2A.

A42. Storm expenses vary with weather conditions, so NIPSCO analyzed storm
expense history looking back both 5 years and 7 years. Both periods
produced similar results of approximately $3,000,000 of non-labor storm expense, therefore a 5 year average of $3,056,037 was deemed to be an appropriate reflection of the ongoing, normalized value of non-labor Storm expense. Adjustment OM 2A-17 increases non-labor Storm expense for the Historic Base Period by $1,336,602 to approximate a 5 year average of storm expense. The Historic Base Period was a mild storm year, incurring only $1,644,457 of storm expense. Adjustment OM 2A-18 increases the 2017 normalized expense by $74,979 to reach the 5 year average of $3,056,037 included in the 2018 Budget Period. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2A.

Q43. Please describe Adjustment OM 2B-18 and OM 2B-19 for Pure Air expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2B.

A43. Adjustments OM 2B-18 and OM 2B-19 eliminate Pure Air expenses in the amount of $10,702,282 and $8,568,689, respectively, because with the retirement of Bailly Units 7 and 8 the Pure Air FGD facility will no longer be required to operate so the associated expenses will no longer be incurred. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2B.
Q44. Please describe Adjustments OM 2C-18 and OM 2C-19 for Generation Maintenance Activity expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2C.

A44. Adjustment OM 2C-18 reduces forecasted Generation Base Maintenance expense by $6,785,009 as a reflection of (a) a $1.9 million budget reprioritization decision, (b) a $2.4 million pull forward of 2018 budgeted dollars into 2017 to pre-purchase materials, and (c) a $1.1 million reduction in planned outages. While operationally advantageous, they were isolated opportunities and should therefore not be reflected in the ongoing level of operating expenses. Adjustment OM 2C-19 is an increase of $1,590,485 to reflect 2019 planned increases in cooling water chemical expenses. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2C.

Q45. Please describe Adjustments OM 2D-18 and OM 2D-19 for non labor Bailly Base Maintenance Activity expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2D.

A45. Adjustments OM 2D-18 and OM 2D-19 reduce Bailly Base Maintenance Expense by $3,600,000 and $3,800,000, respectively, due to the retirement of Bailly Units 7 and 8. The retirements were completed in May 2018,
therefore, the $3,600,000 reduction to the 2017 actuals represents seven months of savings. An additional $3,800,000 of savings in 2019 will bring the total Bailly Base Maintenance Expense savings to $7,400,000. The remaining Bailly base maintenance budget of $848,092 will be used to maintain the synchronous condenser unit and the Unit 10 combustion turbine that will remain in service at that location. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2D.

Q46. Please describe Adjustment OM 2E-17 for Planned Outages normalization shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2E.

A46. Adjustment OM 2E-17 for Planned Outages normalization reduces the Historic Base Period by $25,455 for non-recurring Planned Outages at Bailly due to the retirement of Units 7 and 8. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2E.

Q47. Please describe Adjustments OM 2E-18, 2E-19, and 2E-19R for Planned Outages expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2E.
A47. Adjustment OM 2E-18 reflects a decrease of $9,771,420 in normalized outage expenditures in 2017 to budgeted expenditures in 2018, and Adjustment OM 2E-19 reflects a budgeted increase in planned outages expense of $13,800,000 from the 2018 to 2019 budget. The planned outage schedule varies by year, and the workplan for each generating station details the projected expenditure amount by station, unit, and major component. Adjustment 2E-19R reflects a decrease of $5,962,260 to normalize non-Bailly planned outage expense to a three year average of $30,437,740. Details of these adjustments can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2E.

Q48. Please describe Adjustment OM 2F-17 for Forced Outage normalization shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2F.

A48. Adjustment OM 2F-17 Forced Outage Expense normalization reduces the Historic Base Period by $7,668,139 to reflect removal of expenses associated with forced outages at Bailly Units 7 and 8 as those units have been retired. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2F.
Q49. Please describe Adjustments OM 2F-18 and OM 2F-19R for Forced Outages expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2F.

A49. Adjustment OM 2F-18 reflects an increase to the normalized Historic Base Period of $119,959 to reflect the 2018 budget level of expenditures. Adjustment OM 2F-19R then increases the ongoing level by $215,132 to reflect the average value of $5,261,129 per year actually experienced in 2015 through 2017. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2F.

Q50. Please describe Adjustments OM 2G-18, OM 2G-19, and OM 2G-19R for Vegetation Management expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2G.

A50. Since the 44688 Electric Rate Case, NIPSCO has increased the budget portion of its 69 kV, 34 kV, and 12 kV vegetation management programs to include more circuit line miles. The program includes analyzing circuits on a yearly basis to determine which circuits, regardless of when the circuit was last trimmed, have had a higher experience of interruptions. Those circuits are surveyed, sources of tree interruptions identified, and remedial work performed.
Compared to the same time frame (January through June) as last year, NIPSCO has experienced an overall reduction in tree related outages (329) and the number of customers impacted (13,472).

The 2018 Annual Financial Plan for budget year 2019 includes the performance of line clearing on approximately 1,500 miles. However, in 2017 NIPSCO began to experience higher external labor and equipment costs to perform clearance work due to market conditions which is reflected in Adjustments OM 2G-18 ($1,391,272) and OM 2G-19 ($1,717,287) that increase Historic Base Period non-labor vegetation management expenses for 2018 and 2019 to budgeted increases in cost. According to NIPSCO contractors, the market constraints are due to the low unemployment rate, and other utilities increasing their demand for vegetation contractors. To control costs, NIPSCO has implemented a distribution spray program in the areas it recently performed work. This will help control brush and re-growth, resulting in better reliability and less vegetation clearing at the next scheduled maintenance interval. NIPSCO has also worked with its contractors to streamline its work planning process and allowed the use of specialized equipment to reduce the time and expense in managing some of its vegetation right of ways. Finally, NIPSCO has recently negotiated a
long term contract with its contractors to lock in labor and equipment rates for the next three years. Although NIPSCO has been prudent in managing vegetation costs, the overall impact of the market constraints will lead to NIPSCO falling approximately 500 miles short of its 2019 goal at current funding levels. Therefore, as shown in Adjustment OM 2G-19R, NIPSCO has made a 53%, or $5,720,500, market adjustment increase to vegetation management expense to permit it to retain the 1,500 mile goal for 2019 thereby permitting NIPSCO to continue to take the steps necessary to reduce vegetation related outages. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2G.

Q51. Please describe Adjustments OM 2H-17, OM 2H-18 and OM 2H-19R for Line Locate expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2H.

A51. Adjustment OM 2H-17 decreases the Historic Base Period operating expense by $128,042 to reflect a full year of pricing and efficiencies gained under the terms of two new locate contracts that became effective on March 8, 2017. The average ticket cost under NIPSCO’s new locate contracts is $29.38 per ticket for combination gas and electric locates and $12.93 per ticket for electric only locates in comparison to the cost under the previous
contract of $19.90 per ticket. The incremental cost per ticket was then
multiplied by the number of locates in the twelve month period between
May of 2017 and April of 2018 to capture a full 12 month period of actual
data to develop the normalized value.

Adjustment OM 2H-18 decreases the normalized Historic Base Period line
locate expense by $522,189 to reflect the amount budgeted for line locating
in 2018. Adjustment OM 2H-19R increases future test year locate expenses
by $1,489,294 based on (1) an anticipated increase of $20,951 to reflect an
increase in the projected number of 811 tickets in 2019, and (2) an increase
of $1,468,343 to reflect the increase in the cost per ticket of those line locates.
The increase in 811 ticket volume and line locates was calculated based on
a projected increase in volume of 10.3% per year over the Historic Base
Period volumes. These incremental 811 volumes were multiplied by the
95¢ per ticket and the incremental line locates volumes were multiplied by
2019 average screened prices to calculate the adjustments. Details of this
adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2.
Workpaper OM 2H.
Q52. Please describe Adjustment OM 2I-18 for Variable Chemicals expenses shown on Petitioner's Exhibit No. 4, Attachment 4-C-S2, OM 2I.

A52. Adjustment OM 2I-18 reflects a decrease in Variable Chemical expenses of $1,164,262 from the Historic Base Period to reflect an on-going budgeted change in mix of the types and quantities of variable chemicals utilized subsequent to the retirement of Bailly Units 7 and 8. Note, Units 12, 14, and 15 require Urea and Limestone for use in the emissions control systems at those facilities. Details of this adjustment can be found in Petitioner's Confidential Exhibit No. 20-S2, Workpaper OM-2I.

Q53. Please describe Adjustments OM 2I-19R and OM 2I-19SS for Variable Chemicals expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2I.

A53. Adjustment OM 2I-19R decreases Variable Chemical expense by $551,509 to levelize Variable Chemical expense to reflect (a) reduced generation of 6.1 Million MWh for 2019 based on the updated PROMOD inputs, and (b) to reflect the redistribution of the MWhs produced by those units to other NIPSCO stations. Adjustment OM 2I-19SS decreases Variable Chemical expenses by $4,745,525 to reflect the implementation of that proposed
service structure and the loss of load associated with NIPSCO’s largest industrial customers.

Q54. Please describe Adjustment OM 2J-18 for Activated Carbon Injection ("ACI") expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2J.

A54. NIPSCO makes use of ACI technology on Units 7, 8, 12, 14, and 15, and ACI expense is calculated by multiplying the cost of injecting a pound of activated carbon by the usage of each unit per hour in relation to the output of each unit. Adjustment OM 2J-18 increases the Historic Base Period by $568,011 to reflect the budgeted elimination of ACI expenses for the retired Units 7 and 8 and an increase in ACI expenses primarily based on a projected increase in output from Unit 15. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2J.

Q55. Please describe Adjustments OM 2J-19R and OM 2J-19SS for ACI expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2J.

A55. Adjustment OM 2J-19R reflects a decrease of $193,163 in projected 2019 ACI expense to reflect a decrease in output from Unit 15 and Adjustment OM 2J-19SS increases ACI expense by $48,158 to reflect the implementation of
the proposed service structure and the loss of load associated with NIPSCO’s largest industrial customers.

Q56. Please describe Adjustment OM 2K-18 and OM 2K-19R for the Sugar Creek Long Term Service Agreement (“LTSA”) expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2K.

A56. LTSA expenses are incurred at Sugar Creek based on fired hours of the unit (Run Time). Adjustment OM 2K-18 reflects an increase to the Historic Base Period of $115,416 in LTSA expenses for the 2018 budget based upon the increased Run Time of the Sugar Creek units. Adjustment OM 2K-19R is a ratemaking adjustment decreasing annual LTSA expenses by $3,774,547 to reflect changes in the LTSA contract executed after the preparation of the 2019 budget. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2K.

Q57. Please describe Adjustment OM 2L-17 for miscellaneous operating expenses normalization shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2L.

A57. Adjustment OM 2L-17 decreases the Historic Base Period miscellaneous operating expenses by $1,379,154 as these amounts were not budgeted as
ongoing expense in 2018 or 2019. As such, NIPSCO reduced its base year expense level to represent a normal test year for these miscellaneous operating expenses. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2L.

Q58. Please describe Adjustment OM 2M-19R for MVP expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2M.

A58. Adjustment OM 2M-19R is a ratemaking adjustment to decrease O&M expenses associated with the Reynolds to Topeka and Reynolds to Greentown MVP projects from the revenue requirement beginning in 2019 in the amount of $219,821. As I discuss above, those projects are non-jurisdictional and not appropriate for recovery from NIPSCO retail customers. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2M.

Q59. Please describe Adjustment OM 2N-19R for Cost Savings Initiatives expenses shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 2N.

A59. Adjustment OM 2N-19R decreases 2019 O&M expenses by $3,890,900 to reflect the projected impact of several cost saving initiatives beginning in
2019. These initiatives include the use of a number of contracting options with vendors as well as in-sourcing some activities to increase efficiency and are based on the annualization of projected savings. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 2N.

Q60. Please describe Adjustment OM 4B-19R and OM 4-19SS shown on Petitioner’s Exhibit No. 4, Attachment 4-C-S2, OM 4.

A60. Adjustment OM 4B-19R increases Forward Test Year operating expenses by $8,228,823 to reflect the ongoing level of O&M expenses associated with NIPSCO’s MATS Compliance Project and MPCP Project currently being recovered through NIPSCO’s ECRM. Upon implementation of new base rates, these costs will no longer be recovered through the ECR Tracker. All costs for compliance with MATS associated with Bailly have been removed.

Adjustment OM 4-19SS increases the on-going level of O&M expenses associated with NIPSCO’s MATS Compliance Project and MPCP Project by $24,124 to reflect the implementation of the proposed service structure and the loss of load associated with NIPSCO’s largest industrial customers. Details of this adjustment can be found in Petitioner’s Confidential Exhibit No. 20-S2, Workpaper OM 4-ECRM (including respective calculations).
Q61. Please describe Adjustment OM 5-18, OM 5-19 and OM 5B-19R shown on
   Petitioner’s Exhibit No. 4, Attachment 4-C, OM 5.

A61. Adjustment OM 5-18 and 5-19 increase the Historic Base Period by
   $4,039,088 and 2,384,304, respectively, for budgeted increases in FMCA
   tracker expense. OM 5B-19R increases Forward Test Year operating
   expenses by $8,344,575 to reflect the ongoing level of O&M expenses
   associated with NIPSCO’s NERC Compliance Project currently being
   recovered through NIPSCO’s FMCA. Upon implementation of new base
   rates, these costs will no longer be recovered through the FMCA Tracker.
   Details of this adjustment can be found in Petitioner’s Confidential Exhibit
   No. 20-S2, Workpaper OM 5-FMCA.

Q62. Does this conclude your prefiled direct testimony?

A62. Yes.
VERIFICATION

I, Benjamin Felton, Senior Vice President, NIPSCO Electric of Northern Indiana Public Service Company LLC, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

[Signature]

Benjamin Felton

Date: October 31, 2018