OFFICIAL EXHIBITS

FILED
April 4, 2018
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY FOR (1) APPROVAL OF AN ADJUSTMENT TO ITS ELECTRIC SERVICE RATES THROUGH ITS TRANSMISSION, DISTRIBUTION, AND STORAGE SYSTEM IMPROVEMENT CHARGE ("TDSIC") RATE SCHEDULE; (2) AUTHORITY TO DEFER 20% OF THE APPROVED CAPITAL EXPENDITURES AND TDSIC COSTS FOR RECOVERY IN PETITIONER'S NEXT GENERAL RATE CASE; (3) APPROVAL OF PETITIONER'S UPDATED 7-YEAR ELECTRIC PLAN, INCLUDING ACTUAL AND PROPOSED ESTIMATED CAPITAL EXPENDITURES AND TDSIC COSTS THAT EXCEED THE APPROVED AMOUNTS IN CAUSE NO. 44733-TDSIC-2, ALL PURSUANT TO IND. CODE § 8-1-39-9; AND (4) A MODIFICATION TO APPENDIX J – TRANSMISSION, DISTRIBUTION, AND STORAGE SYSTEM IMPROVEMENT CHARGE.	)	CAUSE NO. 44733-TDSIC-3

IURC
PUBLIC'S
EXHIBIT NO. 2
4-30-18 AT
DATE REPORTER

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

REDACTED TESTIMONY OF

ANTHONY A. ALVAREZ – PUBLIC'S EXHIBIT NO. 2

APRIL 4, 2018

Respectfully submitted,

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TESTIMONY OF OUCC WITNESS ANTHONY A. ALVAREZ
CAUSE NO. 44733 TDSIC-3
NORTHERN INDIANA PUBLIC SERVICE COMPANY

I. INTRODUCTION

Q: Please state your name, business address, and employment capacity.

A: My name is Anthony A. Alvarez, and my business address is 115 West Washington Street, Suite 1500 South, Indianapolis, Indiana 46204. I am employed as a Utility Analyst in the Electric Division of the Indiana Office of Utility Consumer Counselor ("OUCC"). I describe my educational background and preparation for this filing in Appendix A to my testimony.

Q: Have you previously testified before the Indiana Utility Regulatory Commission ("Commission")?

A: Yes. I have testified in a number of cases before the Commission, including electric utility base rate cases, environmental tracker cases, Transmission, Distribution, and Storage System Improvement Charge ("TDSIC") cases, and applications for Certificates of Public Convenience and Necessity ("CPCN").

Q: What is the purpose of your testimony?

A: I provide my opinion, from an engineering perspective, on Northern Indiana Public Service Company's ("Petitioner" or "NIPSCO") request for Commission approval of updates to the cost estimates of its 7-Year Electric Plan ("Plan Update-3" or "Plan") for eligible TDSIC improvements in this proceeding ("TDSIC-3"). I provide an overview of the annual and cumulative cost caps in NIPSCO's proposed Plan Update-3 and the overall progress of the proposed Plan. I then discuss my review of the project cost estimates NIPSCO updated in its Plan

Update-3. I provide the results of my analysis and evaluation of the driving factors of certain project cost variances. Finally, to the extent, NIPSCO's TDSIC costs do not exceed the $1.25 billion cap set in Cause No. 44733; I recommend the Commission approve NIPSCO's Plan Update-3 and associate project cost estimates.

II. ANNUAL AND CUMULATIVE COST CAPS REVIEW

Q: Please provide an overview of the annual cost caps in NIPSCO's proposed Plan Update-3.

A: The Settlement Agreement approved by the Commission in its final order in Cause No. 44733 ("Settlement Agreement") capped NIPSCO's total 7-Year TDSIC capital expenditures at a maximum of $1.25 billion.[1] However, the Settlement Agreement allowed NIPSCO to reschedule projects within its original TDSIC Plan and adjust the annual caps of the affected years by the approved estimates of the rescheduled projects.[2] Therefore, the annual caps of the affected years will *increase* or *decrease* in correspondence with the moving *in* or *out* of the rescheduled project's approved estimate.[3] Further, the Settlement Agreement also allows NIPSCO "the ability to deviate above each annual cost recovery cap by no

1 See Section 2 – NIPSCO's T&D Plan, Page 2, Settlement Agreement, IURC Approved Order in Cause No. 44733 dated July 12, 2016.

2 See Settlement Agreement, Section 5(b) – T&D Plan Flexibility, Page 4, "In the event that a given project, in whole or in part, is rescheduled to a different year, the annual cost recovery caps for the affected years will be adjusted by that project's whole or partial approved cost estimate to reflect the change (e.g., if a $10 million project is moved from 2018 to 2019, the annual cap for 2018 will be reduced by $10 million and the annual cap for 2019 will be increased by $10 million).

3 The cost cap will increase for the year the project moved into and decrease for the year the project moved out of correspondingly by the amount of the project's approved estimate.

more than 5% in a rolling historical three-year period."[4] NIPSCO already made cap moves and adjusted annual caps in its previous TDSIC-1 and TDSIC-2 filings.[5] It proposes to do the same in this Cause.[6] I compiled NIPSCO's historical and proposed cap moves and annual cap adjustments in Table 1 below.[7]

Table 1 – NIPSCO's Historical and Proposed Cap Moves and Annual Cap Adjustments, TDSIC-3

(A) Line No.	(B) Description	(C) 2016	(D) 2017	(E) 2018	(F) 2019	(G) 2020	(H) 2021	(I) 2022	(J) 7-Year Total
1	Approved Annual Cost Recovery Cap	135,767,602	112,159,247	160,259,646	209,113,823	209,560,172	213,831,907	211,261,638	1,251,954,035
2	Cap Moves, TDSIC-1	978,405	1,515,256	2,320,915	-4,765,634	-48,942	-	-	-
3	Annual Cap, TDSIC-1	136,746,007	113,674,503	162,580,561	204,348,189	209,511,230	213,831,907	211,261,638	1,251,954,035
4	Cap Moves, TDSIC-2*	12,156,094	37,539,358	-11,272,154	1,161,155	-13,326,504	-13,256,538	-13,001,411	-
5	Annual Cap, TDSIC-2*	148,902,101	151,213,861	151,308,407	205,509,344	196,184,726	200,575,369	198,260,227	1,251,954,035
6	Proposed Cap Moves, TDSIC-3	-	-6,902,366	16,887,331	-6,072,363	-2,011,672	-5,107,703	3,206,773	-
7	**Proposed Annual Cap, TDSIC-3**	**148,902,101**	**144,311,495**	**168,195,738**	**199,436,981**	**194,173,054**	**195,467,666**	**201,467,000**	**1,251,954,035**

* *Revised TDSIC-2 numbers*

In its Plan Update-3, NIPSCO proposes to increase its cost caps in years 2018 and 2022, and decrease its cost caps in years 2017, 2019, 2020, and 2021.

Q: Are NIPSCO's proposed Plan Update-3 cap moves and annual cap adjustments consistent with the Settlement Agreement?

A: Yes. As shown in Table 1 above, the Commission approved NIPSCO's Plan Update-2 (Table 1, Line 4) included the movement of large projects into years

[4] *See* Settlement Agreement, Section 4(d) – Capital Cost Reductions and Cost Cap, Page 3. "Any amount below the annual cap in a given year may be rolled over as an increase to the cap for the following years within the three year rolling period. Any amount above the annual cap in a given year will operate as an offset to the available cap variance for the following years within the three year rolling period."

[5] *See* NIPSCO's cap moves in Line No. 5 of Petitioner's Exhibit No. 4, Attachment 4-B in Cause No. 44733 TDSIC-1 and in Petitioner's Revised Exhibit No. 4, Attachments 4-A (line no. 41, Page 1) and 4-B (line no. 6) in Cause No. 44733 TDSIC-2.

[6] *See* Cause No. 44733 TDSIC-3, Petitioner's Exhibit No. 4, Attachment 4-B, line no. 6.

[7] Table 1 data source: Petitioner's Exhibit No. 4, Attachment 4-B in previous and current TDSIC proceedings.

2016 ($12.1M) and 2017 ($37.5M) from future years, i.e., 2018 (-$11.3M), which resulted in large increases in the annual cost caps of years 2016 and 2017 (Table 1, Line 5). However, in its proposed Plan Update-3, NIPSCO proposes to move some of the projects out of 2017 (-$6.9M) and move back some of those projects in 2018 ($16.9M). This will increase its year 2018 cost cap to $168.2 million (Table 1, Col. E, Line 7) higher than the originally approved $160.2 million (Table 1, Col. E, Line 1). Year 2018 marks the first three-year historical rolling period for NIPSCO's TDSIC Plan. Therefore, if NIPSCO's projected capital spends for years 2017 and 2018 do not meet the forecast, it may risk the chance to recover part of the 2016 cost cap that has been rolled into 2017 and 2018.

Q: Please provide an overview of the cumulative caps in NIPSCO's proposed Plan Update-3.

A: The Settlement Agreement allows NIPSCO to aggregate or rollover a portion of its annual cost cap as an increase to the cap for the following years within a three-year rolling period.[8] The cumulative cap mechanism adds flexibility to the Plan by allowing any amount spent over or under the previous year cap to rollover as an increase or decrease to the following years' caps, respectively, within a three-year period. Table 1a below summarizes NIPSCO's proposed cumulative caps in its Plan Update-3.[9]

[8] Settlement Agreement, Section 4(d) – Capital Cost Reductions and Cost Cap, Page 3.

[9] Table 1a data source: Pet. Exh. No. 4, Attach. 4-B, line nos. 7 through 10.

Table 1a –TDSIC-3 Proposed Cumulative Caps

(A) Line No.	(B) Description	(C) 2016	(D) 2017	(E) 2018	(F) 2019	(G) 2020	(H) 2021	(I) 2022
1	Proposed Annual Cap, TDSIC-3	148,902,101	144,311,495	168,195,738	199,436,981	194,173,054	195,467,666	201,467,000
2	Cumulative Cap, 3-Year Rolling	148,902,101	293,213,596	461,409,334	511,944,214	561,805,773	589,077,701	591,107,720
3	Cumulative5% Limit	7,445,105	14,660,680	23,070,467	25,597,211	28,090,289	29,453,885	29,555,386
4	3-Year Rolling Cap w/ 5% Limit	156,347,206	307,874,276	484,479,801	537,541,425	589,896,062	618,531,586	620,663,106

Q: Do you have any concerns regarding NIPSCO's proposed cap moves, annual cap adjustments and cumulative caps in this Cause?

A: No.

III. HISTORICAL AND PROPOSED ANNUAL CAPS VS. PLAN SPEND

Q: Please describe the difference between NIPSCO's annual caps and its project capital spend.

A: As shown in Table 1, NIPSCO adjusted its annual caps within the TDSIC Plan by moving projects in and out of the various years (Lines 2, 4 and 6) in each of its TDSIC tracker filings. NIPSCO also provided a Plan Update in each tracker filing that included its projected capital spend by year. NIPSCO's projected capital spend does not necessarily equal its corresponding adjusted annual cap. Table 2 below summarizes NIPSCO's historical and proposed adjusted annual caps vs. its annual projected capital spend for its TDSIC-1, TDSIC-2 and TDSIC-3 trackers.[10]

[10] Table 2 data sources: Petitioner's Exhibit No. 4, Attachment 4-B, in Cause No. 44733 TDSIC-1 (previous), TDSIC-2 Revised (previous) and current TDSIC-3 tracker filings.

Table 2 – Historical and Proposed Annual Caps vs. Plan Spend

(A) Line No.	(B) Description	(C) 2016*	(D) 2017	(E) 2018	(F) 2019	(G) 2020	(H) 2021	(I) 2022	(J) 7-Year Total
1	Annual Cap, TDSIC-1	136,746,007	113,674,503	162,580,561	204,348,189	209,511,230	213,831,907	211,261,638	1,251,954,035
2	Plan Spend, Update-1	136,030,784	114,374,602	172,463,731	219,346,677	224,510,411	228,847,753	226,262,357	1,321,836,315
3	Variance, TDSIC-1	-715,223	700,099	9,883,170	14,998,488	14,999,181	15,015,846	15,000,719	69,882,280
4	Annual Cap, TDSIC-2	148,902,101	151,213,861	151,308,407	205,509,344	196,184,726	200,575,369	198,260,227	1,251,954,035
5	Plan Spend, Update-2	129,450,119	129,602,675	163,531,646	224,036,082	211,319,780	215,581,702	213,257,351	1,286,779,355
6	Variance, TDSIC-2	-19,451,982	-21,611,186	12,223,239	18,526,738	15,135,054	15,006,333	14,997,124	34,825,320
7	Annual Cap, TDSIC-3†	148,902,101	144,311,495	168,195,738	199,436,981	194,173,054	195,467,666	201,467,000	1,251,954,035
8	Proposed Plan Spend, Update-3†	129,450,119	131,277,544	172,896,441	225,110,233	212,786,469	213,924,240	220,282,838	1,305,727,884
9	Variance, TDSIC-3	-19,451,982	-13,033,951	4,700,703	25,673,252	18,613,415	18,456,574	18,815,838	53,773,849

* *2016 numbers are Actuals*
† *TDSIC-3 numbers are Proposed*

Q: Does your review of NIPSCO's historical annual cap, proposed annual cap, and projected spend variances show that NIPSCO will exceed the $1.25 billion cap in the Settlement Agreement?

Yes. As shown in Table 2, Lines 3, 6 and 9, the difference between NIPSCO's adjusted annual cost cap and its corresponding projected capital spend results in a variance. A negative variance indicates that NIPSCO's projected capital spend is below the annual cap. For example, the negative variance amounts for years 2016 and 2017 illustrate how much NIPSCO underspent in each Plan Update (i.e., Plan Updates 1 and 2) and proposes to underspend (i.e., Plant Update-3) in those years. Meanwhile, the positive variance amounts indicates how much NIPSCO's projected spend will exceed its annual cap. For example, in TDSIC-2 and TDSIC-3, the variances for years 2018 through 2022 are all positive indicating NIPSCO plans to spend above its cap in each of these years.

The positive variance amounts in the "7-Year Total" column (Table 2, Col. J) indicate NIPSCO's projected Plan Update will exceed the $1.25 billion cap. In its Plan Update-3, NIPSCO proposes a total projected capital spend that will exceed its overall TDSIC cap by approximately $53.8 million. However, in its direct case NIPSCO states "NIPSCO will not seek recovery through the TDSIC tracker of

any amounts in excess of the annual allowed cap."[11] The Settlement Agreement caps the total cost NIPSCO can recover through its TDSIC tracker during the 7-Year Plan at $1.25 billion.

IV. REVIEW OF THE PROJECTS NIPSCO REVISED WITH COST ESTIMATE INCREASES GREATER THAN OR EQUAL TO $100,000 OR 20%

Q: Please describe your review of NIPSCO's projects with cost estimate increases of greater than or equal to $100,000 or 20% its proposed Plan Update-3.

A: Using Petitioner's Confidential Attachment 3-B, I identified each project NIPSCO revised and separated the projects with cost estimate increases of greater than or equal to $100,000 or 20% for further scrutiny and review. I reviewed the data and variance information contained in Confidential Attachment 3-B for each of the years 2017 through 2022. I analyzed the project variances, isolated the revised projects driven by direct cost increases, and eliminated the projects with cost increases attributed to project movement. I evaluated the data, information and variance explanations found in the "Project Detail" and "Project Variances" pages of Confidential Exhibit Electric Plan Update-3. I reviewed NIPSCO Witness Mr. Russell L. Atkins' testimony related to these projects. I discussed the cost estimate increases in detail with NIPSCO's TDSIC team during the January 17, 2018 pre-filing meeting and the February 15, 2018 post-filing meeting.

Q: Please discuss the results of your analysis and review of NIPSCO's proposed Plan-Update-3 projects with cost increases greater than $100,000 or 20%.

[11] Petitioner's Exhibit No. 4 at 16, lines 5 – 7.

A: I identified the 15 revised projects with cost increases greater than or equal to $100,000 or 20% that were included in NIPSCO's Plan Update-3. I verified the amount and percent variance calculations of each revised project, and removed any project movement costs NIPSCO attributed to the project. Mr. Atkins discusses four projects in his testimony with "noteworthy cost increases for the 2017 Projects,"[12] but because those increases are actually due to project movement costs, those projects are not included in the 15 revised projects I discuss below. I discuss the cost drivers of the fifteen revised projects with significant cost increases below.

2017 Projects

1. TSRU9: Install Fiber Optic Static from St. John to Enbridge-13834, $[redacted] (11%). The contract labor NIPSCO needed to complete the project within the available Midcontinent Independent System Operator ("MISO") clearance window increased the cost of this project.[13] The construction crew incurred additional costs for environmental support materials such as filter socks, orange fencing, etc., and ground matting for golf course turf protection. The additional material and labor costs raised the overall cost of the project.

[12] Mr. Atkins, Direct at 45, Lines 5 – 26 through Page 49, Lines 1 – 2. Project movement costs accounted for the cost increases of Project IDs: TSA1, TSPT1, TLNRL8, and DSNRS8. *See* Project Plan Variances (Moves & Cost) worksheet for year 2017 in Confidential Attachment 3-B in this Cause.

[13] *See* Confidential Appendix 3.3, p. 2.

2. TSRU16: 69kV Plymouth Breakers and Relay Upgrades, $[redacted] (6%). NIPSCO replaced the line switch operating mechanisms affected by the project due to incompatibility issues. The line crew noticed and replaced the incompatibility of the line switch operating mechanisms while construction was underway. The project incurred additional labor and material costs due to the change in the actual field conditions which drove the overall cost increase of this project.[14] Although not typical, line crews may find operational incompatibilities between existing equipment and new equipment/upgrades.
3. D4KVL5: 4 kV Conversion - 40th Ave Circuit 21941, $[redacted], (7%). NIPSCO required hydro excavation to prevent the damage of existing underground utilities in close proximity of the work area. Actual field conditions required pole barreling to stabilize the excavated holes and prevent the sandy soil from backfilling. The cost of the specialized equipment and contracted services drove the increased cost of this project.[15]
4. D4KVL6: 4 kV Conversion - Cleveland Circuit 8943, $[redacted] (24%). This project required hydro excavation (pressurized water) and pole barreling (shoring). In addition, the project incurred an extended outage to complete the work due to inclement weather, and NIPSCO brought in

[14] *See* Confidential Appendix 3.3, p. 5.

[15] *See* Confidential Appendix 3.3, p. 25.

portable generators to serve affected customers. Additional labor and materials were required to install the pad mounted replacement transformers. The specialized equipment and contracted services costs drove the overall cost increase of this project.

5. D4KVL7: 4 kV Conversion - Hyde Park Circuits 22541 & 22542, $[redacted] (19%). This project required hydro excavation and pole barreling. Moreover, actual field conditions located 1,200 feet of ageing underground cable that needed replaced. NIPSCO contracted additional service crews to maintain the construction schedule after it released its other contract crews to support hurricane restoration efforts and to handle work area safety and traffic control during construction, which drove the overall increase of this project.[16] Field condition changes, additional material and labor, specialized equipment, and safety issues added to the cost increase of this project.

6. DSRU2: Dune Acres 34kV Relay Upgrade with Breakers, $[redacted] (12%). The high water table contributed to poor worksite conditions that reduced productivity and required additional crews to meet the MISO outage clearance window. The construction crew had difficulty maintaining safe electrical clearances from high voltage lines. Actual field conditions required increased length of cable pulls to maintain long cable runs reducing the number of cable splices. The crew installed a relay and

[16] *See* Confidential Appendix 3.3, p. 27.

additional fiber optic links between two control houses. Poor worksite conditions, increased project complexity, additional cable pulls, line crews, and equipment increased the material and labor costs of this project.[17]

7. DSE1: Substation Engineering – Distribution, $[redacted] (20%). Additional engineering was required to modify the design and configuration of five 2018 projects to replace circuit switchers with transrupters for transformer protection. NIPSCO encountered difficulties and increasing costs during the construction and installation of the substation circuit switchers based on the previous design. NIPSCO contracted an outside engineering firms to modify the substation design increased the overall cost of this project.[18]

8. DLWP1: Pole Replacement Projects – Distribution, $[redacted] (20%). Increases in contracted labor (approximately $[redacted]) and contracted services (approximately $[redacted]) costs raised the overall cost of this project. NIPSCO experienced an increase in its pole rejection rate to 10.8% in 2017. Based on this increase, NIPSCO expects to replace an additional 102 poles and move 113 poles to contract labor. Moreover, poor worksite conditions required the use of matting to access poles, use of hydro excavation to prevent damaging existing underground utilities in close proximity with the work area, and additional traffic control crew, all

[17] *See* Confidential Appendix 3.3, p. 33.

[18] *See* Confidential Appendix 3.3, p. 41.

of which increased the projected contract labor and services costs of this project.[19]

9. DLE1: Line Engineering - Distribution, $[redacted] (12%). NIPSCO shifted more engineering work to contracted engineering firms due to its internal resources increased workload. The use of contract engineering firms drove the overall cost increase of this project.[20]

2018 Projects

10. TSE1: Substation Engineering – Transmission, $[redacted] (13%). This cost variance is due to the cost of engineering services for the East Chicago Substation project.[21] $[redacted] of the engineering expense represents about 9.38% of the approximately $[redacted] million construction cost estimate (Project ID TSNRS14, year 2019). The OUCC will monitor both engineering and construction cost estimates associated with the East Chicago Substation project in future TDSIC tracker filings.[22]

11. D4KVL9: 4kV Line Conversion - Gary Heights/Tompkins – 16244, 16241, $[redacted] (40%). Based on other 4kV Line Conversion projects estimates (in year 2017), NIPSCO updated and increased the cost estimate of contracted services to complete this project. Based on its experience

[19] *See* Confidential Appendix 3.3, p. 43 – 45.

[20] *See* Confidential Appendix 3.3, p. 51.

[21] Mr. Atkins, Direct at pp. 39 – 42, discussed the East Chicago Substation project. Project ID TSE1 included costs associated with engineering the East Chicago Substation project, and Project ID TSNRS14 included the construction for the project. *Id.* at p. 41, lines 10 – 14.

[22] *See* Confidential Appendix 4.1, p. 5.

with the 2017 4kV conversion projects, NIPSCO anticipates it will use more hydro excavation, pole barreling and shoring, and additional contract labor and traffic crew. NIPSCO forecasts it will use additional specialized equipment, materials, and contract services costs, all of which drove the overall projected cost increase for this project.[23]

12. D4KVL10: 4kV Line Conversion – Clark Road – 18344, $[redacted] (60%). NIPSCO updated the amount of contracted services it expects to use to complete this project similar to other 4kV Line Conversion projects discussed earlier. The increase in contracted services cost drove the overall increase of this project.[24]

13. DLWP1: Pole Replacement Projects – Distribution, $[redacted] (11%). The contracted labor cost drove the overall increase of this project. NIPSCO reduced the contracted services cost (by approximately $[redacted] million) and external material cost (by approximately $[redacted] million), and added contracted labor cost of approximately $[redacted] million to the project.[25] As discussed above, NIPSCO experienced an increase in its pole rejection rate to 10.8% in 2017, creating a need to replace an additional 102 poles and move 113 poles to contract labor. Moreover, poor worksite conditions required the use of matting to access poles, use of hydro excavation to prevent damaging existing underground utilities in close proximity with

[23] *See* Confidential Appendix 4.1, p. 12.

[24] *See* Confidential Appendix 3.3, p. 13.

[25] *See* Confidential Appendix 4.1, p. 21.

the work area, and additional traffic control crew added to the overall increase of this project.

2019 Projects

14. TSNRS14: East Chicago Substation, $[redacted]. This project estimate represents the forecasted direct construction cost for the proposed East Chicago Substation project and includes approximately 10% contingency.[26] The direct cost associated with engineering the project is included in Project ID TSE1 (in year 2017).

2020 Projects

15. TSE1: Substation Engineering – Transmission, $[redacted] (44%). The cost estimate increase represents the direct engineering costs of the proposed transmission substation projects in year 2022.[27] The OUCC will monitor both engineering and construction cost estimates associated with the proposed transmission substation projects in subsequent TDSIC tracker filings. [28]

Q: Did you notice any trends between the cost drivers for the revised projects with significant cost increases that you discussed?

A: Yes. It appeared the overall cost increases of 4kV line conversion projects in years 2017 and 2018 (Project IDs: D4KVL5, D4KVL6, D4KVL7, D4KVL9, and DKVL10) were primarily driven by an increase in the amount of contracted

[26] *See* Confidential Appendix 5, p. 1.

[27] Mr. Atkins, Direct at 59, Lines 5 – 9. *See also* Confidential Attachment 3-B - Electric 2020 Plan Project Variances (Moves & Cost).

[28] Year 2022 transmission substation projects, Project IDs TSBRU1, TSBRU2, TSBRU3, TSRU17, TSRU18, and TSTU3. *See* Mr. Atkins, Direct at 59, Lines 5 – 9.

services. The cause of the change was identified in the corresponding Filing Project Change Request ("PCR") for each project (i.e., "weather impacts & site conditions," "field condition," etc.) which resulted in increases to contracted services costs. Nonetheless, each PCR provided justification to support the change. The overall increases for NIPSCO's pole replacement projects (Project ID: DLWP1 in years 2017 and 2018) appear to be primarily driven by contractor labor increases. The corresponding PCR of each project provided justification to support these cost estimate increases.

Q: Do you believe NIPSCO provided adequate support for the revised projects with significant cost increases in its proposed Plan Update-3?

A: Yes. However, the OUCC will continue to monitor the costs of these projects in subsequent tracker filings.

Q: How did NIPSCO fund the revised projects with significant cost increases in its proposed Plan Update-3?

A: NIPSCO structured its TDSIC program by project category and by specific project that span multiple years and may revise or update the cost estimates of the projects scheduled for the upcoming year. The Settlement Agreement allows NIPSCO to use cost decreases to offset cost increases of revised projects within the limits stipulated in the Settlement Agreement.[29] In its proposed Plan Update-3, NIPSCO revised approximately 133 projects. Of the 133 revised projects, 49 project (direct) cost estimates *increased* by approximately $42.3 million and the remaining 84 project cost estimates *decreased* by approximately $37.6 million,

[29] Settlement Agreement, Section 4(d) – Capital Cost Reductions and Cost Cap, p. 3, and Section 5(b) – T&D Plan Flexibility, p. 5.

resulting in a *net cost increase* of approximately $4.6 million.[30] The 15 projects with significant cost increases I discussed earlier were among the 49 revised projects that incurred cost increases. Table 3 below provides a summary of NIPSCO's 133 revised projects and the corresponding direct dollar increase and decrease by year.[31]

Table 3 – Direct Dollars, Increases and Decreases, by Year

(A) Line No.	(B) Direct Dollars, Count	(C) 2017	(D) 2018	(E) 2019	(F) 2020	(G) 2021	(H) 2022	(I) Total
1	Increase	6,385,562	11,123,377	12,565,579	6,408,259	95,118	5,717,257	42,295,152
2	Count	16	17	6	5	2	3	49
3	Decrease	-6,738,202	-4,629,566	-11,129,575	-8,109,419	-4,611,212	-2,436,108	37,654,082
4	Count	21	11	24	10	11	7	84
5	Prior Year	-21,731	-	-	-	-	-	-
6	Total Direct Dollars	-374,371	6,493,811	1,436,004	-1,701,160	-4,516,094	3,281,149	4,619,339
	Total Count							133

V. OTHER TOPICS

Q: Did NIPSCO maintain the overall composition of the projects included in its Plan Update-3 at 61 percent distribution projects and 39 percent transmission projects, plus or minus one percent, as stipulated in the Settlement Agreement?

A: Yes. NIPSCO maintained the overall composition of the projects as stipulated in the Settlement Agreement.[32]

[30] Confidential Exhibit Plan Update-3, pp. 1 – 33.

[31] Table 3 data sources: Confidential Exhibit Plan Update-3 and Confidential Attachment 3-B.

[32] Mr. Atkins, Direct at 64, Line 8.

VI. CONCLUSIONS AND RECOMMENDATIONS

Q: Please summarize your recommendations.

A: The OUCC recommends the Commission approve NIPSCO's proposed Plan Update-3 not to exceed its $1.25 billion cap, as stipulated in the Settlement Agreement.

Q: Does this conclude your testimony?

A: Yes.

APPENDIX A

Q: Please describe your educational background and experience.

A: I hold an MBA from the University of the Philippines ("UP"), in Diliman, Quezon City, Philippines. I also hold a Bachelor's Degree in Electrical Engineering from the University of Santo Tomas ("UST"), in Manila, Philippines.

I joined the OUCC in July 2009 as a Utility Analyst, and have completed the regulatory studies program at Michigan State University sponsored by the National Association of Regulatory Utility Commissioners ("NARUC"). I have also participated in other utility and renewable energy resources-related seminars, forums, and conferences.

Prior to joining the OUCC, I worked for the Manila Electric Company ("MERALCO") in the Philippines as a Senior Project Engineer responsible for overall project and account management for large and medium industrial and commercial customers. I evaluated electrical plans, designed overhead and underground primary and secondary distribution lines and facilities, primary and secondary line revamps, extensions and upgrades with voltages up to 34.5 kV. I successfully completed the MERALCO Power Engineering Program, a two-year program designed for engineers in the power and electrical utility industry.

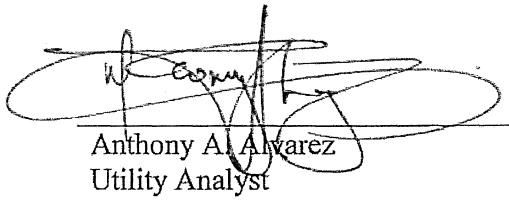
Q: What did you do to prepare your testimony?

A: I reviewed the petition, direct testimony and attached exhibits filed by NIPSCO in this Cause. I also reviewed the Commission's Order in Cause No. 44733, dated

July 12, 2016, approving Petitioner's 7-Year Plan, and the TDSIC Settlement Agreement. Further, I reviewed the Commission's Order in Cause No. 44733 TDSIC-1, dated January 25, 2017, TDSIC-1 Plan; Cause No. 44733 TDSIC-2, dated October 31, 2017; and Petitioner witnesses' testimonies and exhibits filed in TDSIC-1 and TDSIC-2. I participated in meetings and discussions with NIPSCO staff regarding changes to some of its project's actual costs and estimates, and the purpose of the variances between the Commission-approved estimates and the final cost of the completed projects. I reviewed the projects included in the Plan to ensure all project cost estimate changes had adequate explanation and support. I also participated in the OUCC case team meetings and discussions pertaining to this Cause.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



Anthony Al Alvarez
Utility Analyst
Indiana Office of Utility Consumer Counselor

April 4, 2018
Date

CERTIFICATE OF SERVICE

This is to certify that a copy of the ***OUCC Testimony of Anthony A. Alvarez Public's Exhibit No. 2*** has been served upon the following parties of record in the captioned proceeding by electronic service on April 4, 2018.

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