VERIFIED SETTLEMENT TESTIMONY OF ALBERT A. STONE

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

A1. My name is Albert A. "Andy" Stone. My business address is 801 E. 86th Avenue, Merrillville, Indiana 46410. I am the Vice President and General Manager of Northern Indiana Public Service Company ("NIPSCO").

Q2. Are you the same Andy Stone who prefiled direct testimony in this Cause?

A2. Yes.

Q3. What is the purpose of your settlement testimony in this proceeding?

A3. The purpose of my settlement testimony is to support the Stipulation and Settlement Agreement entered into as of the 20th day of April, 2018, by and between NIPSCO, the Indiana Office of Utility Consumer Counselor ("OUCC"), the NIPSCO Industrial Group, the NIPSCO Gas Supplier Group, Steel Dynamics, Inc., EDF Energy Services, LLC, and Direct Energy Business Marketing, LLC and its affiliate Direct Energy Services, LLC (the "Settling Parties")(the "Settlement"). Specifically, my testimony addresses

the five projects added to the Pipeline Safety Compliance Plan (the "Compliance Plan") as part of the Settlement and explains why each is intended to comply with one or more federal mandates.

Q4. Are you sponsoring any attachments to your settlement testimony?

A4. Yes. Attached as Confidential Attachment 3-S-A are the confidential work papers supporting the five projects discussed in this testimony. These work papers were previously filed in support of NIPSCO's general rate case in Cause No. 44988 that is also addressed in the Settlement.

Q5. What projects were added to the Compliance Plan as part of the Settlement?

A5. As part of the Settlement, NIPSCO agreed to remove the following projects from the revenue requirement in NIPSCO's pending base rate case and incorporate them into the Compliance Plan.

Project ID (Proposed Adjustment in Cause No. 44988)	Project
PS20 (OM 2D)	Transmission Risk Modeling
PS21 (OM 2F)	Legacy Cross Bore Inspection
PS22 (OM 2R)	Casings Test Stations
PS23 (OM 2H)	MAOP – Distribution
PS24 (OM 2I)	MAOP - Transmission

Q6. Will your team be responsible for the execution of all five of these projects?

A6. No. My team will be directly responsible for the execution of the Legacy Cross Bore Inspection Project and the Casings Test Station Project and will have shared responsibility for the execution of the MAOP – Distribution Project with NIPSCO's Engineering department. Execution of the two transmission projects, Transmission Risk Modeling, and MAOP – Transmission, will be the responsibility of the TIMP team in the Gas Engineering and Pipeline Safety organization. NIPSCO witness James Roberts sponsored testimony about three of the projects in his testimony in NIPSCO's pending rate case in Cause No. 44988, but I am also familiar with these projects and their basis for inclusion in the Compliance Plan.

TRANSMISSION RISK MODELING (PROJECT ID PS20)

Q7. Please describe the Transmission Risk Modeling Project (Project ID PS20).

A7. As discussed by NIPSCO witness Roberts in NIPSCO's pending gas rate case,

> Transmission risk models are used for two practical but distinct purposes within the life cycle of the development of an effective TIMP strategy. The

first purpose of a transmission risk model was for TIMP development and involved an indexing methodology to identify and prioritize the highest risk of the transmission pipeline systems, and to monitor for pertinent changes during the remainder of the baseline assessment process. The baseline assessment process was completed by NIPSCO in 2010. The second purpose of a transmission risk model is a more quantitative version that manages and analyzes the large volumes of attribute, environment, operational and maintenance data involving the transmission assets and notes changes in risk in conjunction with changes in conditions of these various parameters. These type of systems also analyze the interactions of threats to better understand the cumulative impacts of these conditions.

IURC Cause No. 44988, Petitioner's Exhibit No. 6, at p. 15-16. This Project will enable the acquisition and ongoing licensure of an appropriate software package in association with the other NiSource Local Distribution Companies ("LDCs").

Q8. Please describe the projected federally mandated costs associated with the Transmission Risk Modeling Project and how the cost estimates were developed.

A8. Acquisition and development of more advanced transmission risk modeling software is essential for all of the NiSource LDCs, and is being coordinated across the NiSource footprint. The projected federally mandated cost of $300,000 per year was calculated based on NIPSCO's share of the annual estimated operating cost of that software based upon its

relative miles of transmission pipeline, costs associated with professional services and support, and hardware infrastructure support.

Q9. Please describe how the Transmission Risk Modeling Project allows NIPSCO to comply with a federally mandated requirement.

A9. The TIMP program under 49 CFR Part 192, subpart O is premised on continuous improvement through progressive remediation of known risks, and the development of the transmission risk model is critical to that effort.

Q10. Did NIPSCO evaluate other options for the evaluation of transmission risk?

A10. NIPSCO has attempted to quantify and prioritize risk in the past based on the knowledge and expertise of its subject matter experts. This approach was effective in a limited way, but did not effectively permit the interactive evaluation of threats based on comprehensive data.

Q11. Will the Transmission Risk Modeling Project extend the useful life of an existing facility and, if so, what is the value of that extension?

A11. It is possible that the Transmission Risk Modeling Project could extend the useful life of an existing transmission facility if the model leads to the early identification of pipe segments that can be repaired prior to requiring

replacement, but it is not possible to predict at this juncture whether that will occur and if so the value of the specific assets involved.

LEGACY CROSS-BORE INSPECTION (PROJECT ID PS 21)

Q12. Please describe the Legacy Cross-bore Inspection project (Project ID PS21)

A12. The Legacy Cross-bore Inspection Project is intended to facilitate the proactive investigation of sewer lines within NIPSCO's service territory to identify instances where gas lines have been cross-bored through them so that cross-bores that are identified can be remediated. The hazards and remediation of cross-bores were discussed in my direct testimony in this cause concerning Project ID PS9.

Q13. Please describe the projected federally mandated costs associated with the Legacy Cross-Bore Identification Project and how the cost estimates were developed.

A13. The projected cost of the legacy cross-bore inspection project is $806,200 per year for four years. The estimate was developed based on the cost to create three full time positions dedicated to this initiative and to purchase sufficient equipment to support the evaluation and identification of cross-

bores for up to 59 miles of sewer line by the end of 2018.

Q14. Please describe how the Legacy Cross-Bore Identification Project allows NIPSCO to comply with a federally mandated requirement.

A14. As NIPSCO witness Cote discussed in his direct testimony concerning the Legacy Cross-Bore Remediation Project (Project ID PS9), the Legacy Cross-Bore Identification project is undertaken in compliance with DIMP, 49 CFR Part 192, Subpart P, and is a necessary predicate to the remediation of cross-bores as part of that project.

Q15. Did NIPSCO evaluate other options for dealing with cross-bores?

A15. No. As discussed in my direct testimony on page 25, the only alternative to a proactive cross-bore remediation program is to remediate cross-bores when they are identified. Because the risk associated with the ignition of gas within a building is so high, the programmatic approach is reasonable and necessary. NIPSCO's approach has been successful with other NiSource LDCs and is consistent with best industry practice.

Q16. Will the Legacy Cross Bore Identification Project extend the useful life of an existing facility and, if so, what is the value of that extension?

A16. No. As with the Legacy Cross Bore Remediation Project, the Legacy Cross

Bore Identification Project results in asset replacement when cross-bores are detected, and as such is not intended to extend the life of the assets being replaced.

<u>CASING EVALUATION AND TEST STATION INSTALLATION (PROJECT ID PS22)</u>

Q17. Please describe the Casings Test Stations Project (Project ID PS22).

A17. Carrier pipe casings are steel pipes that were historically used to protect distribution pipe when it was installed at a crossing site such as a bridge over a stream or other obstacle. Carrier pipe casings are no longer commonly used because they have proven over time to trap moisture inside and thereby pose an increased risk of corrosion on the enclosed steel pipe. Contemporary crossings are accomplished through the use of horizontal boring under the obstacle or through the wrapping of the distribution pipe with protective material. The project entails inspecting each of NIPSCO's more than 1,500 cased crossing sites over four years and installing corrosion test stations as to permit these crossings to be monitored in conjunction with NIPSCO's atmospheric corrosion inspection cycle.

Q18. Please describe the projected federally mandated costs associated with the Casings Test Station Project and how the cost estimates were

developed.

A18. The projected federally mandated costs associated with the Casings Test Station Project is $350,000 per year. This will permit these crossings to be monitored in conjunction with NIPSCO's atmospheric corrosion inspection cycle. The project cost estimates were developed based on the time and materials necessary to install a test station.

Q19. Please describe how the Casings Test Station Project allows NIPSCO to comply with a federally mandated requirement.

A19. Similar to the Casings Replacement Project (Project ID PS18), this project is undertaken in compliance with the provisions of 49 CFR § 192.467(c) which requires measures must be taken to minimize corrosion of the pipeline inside of casings, and 49 CFR § 192.935 which mandates a continual evaluation and remediation of known system risks. This project will assist NIPSCO in monitoring casings as part of that process.

Q20. Did NIPSCO evaluate other options for dealing with its carrier pipe casings?

A20. Yes. In evaluating the options to address the integrity risk associated with these crossings, it was determined that the cost of installing test stations

was far lower than the cost of either removing the steel casings themselves or replacing each crossing completely with a new bored crossing. While replacement may eventually prove necessary in some instances, this test station program will allow NIPSCO to monitor these casings and evaluate what, if any, corrective action is required.

Q21. Will the Casings Test Stations Project extend the useful life of an existing facility and, if so, what is the value of that extension?

A21. No. The Casings Test Station Project is intended as a means of monitoring casings to identify instances where corrosion risk exists, and is intended to extend the life of the assets.

MAOP – DISTRIBUTION PROJECT (PROJECT ID PS23)

Q22. Please describe the MAOP – Distribution Project (Project ID PS23).

A22. The verification of distribution Maximum Allowable Operating Pressures ("MAOP") was discussed by NIPSCO witness Roberts in in NIPSCO's pending gas rate case,

> NIPSCO has been pursuing improvement of its gas distribution system records through a linen mining project as part of its Transmission, Distribution, and Storage System Improvement Charge ("TDSIC") gas plan approved in the Commission's April 30, 2014 Order in Cause No. 44403 ("Gas TDSIC Plan"). The linen mining project enables NIPSCO to

utilize the enhanced system records in its Geographic Information System ("GIS") to validate current MAOP records through a tracing methodology based on information captured from NIPSCO's linen books. Linen books are analog records that have been maintained in individual NIPSCO offices for many years, and the information delineated on these records is being captured digitally as part of the linen mining project. Document retention for anything installed prior to initiation of the Code in 1970 was certainly less rigorous in the industry than it is now, so validating what records NIPSCO has and that the records align with the appropriate systems adds another quality assurance layer in the design and operation of those systems.

IURC Cause No. 44988, Petitioner's Exhibit No. 6, at p. 21. The MAOP – Distribution Project entails the engagement of vendors to assist NIPSCO's Engineering Department with the tracing and validation of documents. This project will also work in conjunction with NIPSCO's ongoing efforts to verify and document compliance with system MAOP by individual pipeline attributes.

Q23. How is this project associated with the capture of data from analog linen books initiated through NIPSCO's TDSIC 7-Year Plan?

A23. The capture of analog data is an important step for NIPSCO to modernize and update its system records. This project is intended for the tracing and validation of the data captured thorough that process.

Q24. Please describe the projected federally mandated costs associated with

the MAOP – Distribution Project and how the cost estimates were developed.

A24. The projected federally mandated costs associated with the MAOP – Distribution Project are $500,000 per year. This estimate is the sum of the annual labor costs associated with the hiring of one external project manager and two engineer/engineer tech positions.

Q25. Please describe how the MAOP – Distribution Project allows NIPSCO to comply with a federally mandated requirement.

A25. DIMP, 49 CFR Part 192, Subpart P, requires that NIPSCO undertake an ongoing and progressive assessment of its distribution system and the risks facing it based on a comprehensive evaluation of conditions identified and documented in appropriate records. The ability to verify the accuracy and compliance of the distribution system with established maximum operating pressures is a critical component to that process.

Q26. Did NIPSCO evaluate other options for identifying and compiling MAOP detail for its distribution pipelines?

A26. Yes. NIPSCO considered and tried a number of options including the use of full time internal personnel to complete the work. It was determined to

be advantageous to make use of external resources with demonstrated expertise in records verification to augment internal resources.

Q27. Will the MAOP – Distribution extend the useful life of an existing facility and, if so, what is the value of that extension?

A27. No. While it could result in the continued service life of some assets as a byproduct of the work to be performed, the MAOP – Distribution Project is a data validation and verification project.

MAOP – TRANSMISSION PROJECT (PROJECT ID PS24)

Q28. Please describe the MAOP – Transmission Project (Project ID PS24).

A28. As discussed by Mr. Roberts in his rate case testimony,

> The purpose of a MAOP transmission program is to verify that the MAOP documentation for transmission pipeline assets is traceable, verifiable and complete and to systematically identify gaps due to data or process issues as stated in PHMSA's Advisory Bulletin 11-01. This validation includes a data gathering effort to collect all relevant documentation and identify pressure test and pipeline attribute gaps, development of plans to address documentation gaps and alignment of these data attributes and gas issues into a data repository structure to help with the next phase of execution when the Gas Transmission and Gas Gathering rule is finalized.[1] That rulemaking has been pending at PHMSA in some form for several years and while it has not been promulgated in final form, the draft rule has been consistent with the requirements identified in Advisory Bulletin 11-01, and it is reasonable to assume that it will become part of the Code.

[1] PHMSA Docket No. PHMSA-2011-0023

The continued scrutiny and enhancement of MAOP records supports the execution of NIPSCO's TIMP regardless of when the rule becomes final.

IURC Cause No. 44988, Petitioner's Exhibit No. 6, at pp. 23-24. The MAOP – Transmission Project is intended to permit the capture and validation of advanced attribute data associated with NIPSCO's transmission system.

Q29. Please describe the projected federally mandated costs associated with the MAOP – Transmission Project and how the cost estimates were developed.

A29. The projected federally mandated costs associated with the MAOP – Transmission Project is $1,250,000 per year which represents the sum of the third party engineering costs associated with data mining, records research, field review/material validation, engineering critical analysis and MaxOp MAOP software maintenance.

Q30. Please describe how the MAOP - Transmission Project allows NIPSCO to comply with a federally mandated requirement.

A30. As Mr. Cote describes in his testimony, the TIMP program is premised on continuous improvement through progressive remediation of known risks. The MAOP – Transmission Project will enable NIPSCO to capture and

validate data consistent with the anticipated enactment of the PHMSA Transmission Rule in a manner consistent with PHMSA's current guidance.

Q31. Did NIPSCO evaluate other options for identifying and compiling MAOP detail for its transmission pipelines?

A31. Yes. NIPSCO has worked with a number of outside vendors to evaluate options for completion of this project including completing the baseline data internally. It was determined to be more time efficient and cost-effective to use outside vendors for the gathering of the baseline data set for input into the MaxOP MAOP analytical software. That data will eventually be migrated into a broader integrated risk model package.

Q32. Will the MAOP – Transmission Project extend the useful life of an existing facility and, if so, what is the value of that extension?

A32. No. The MAOP – Transmission Project is intended to quantify data related to existing facilities. While that effort may eventually result in the ability to extend the life of some assets, it is not the focus of the project.

CONCLUSION

Q33. What is your recommendation to the Commission concerning the five additional projects incorporated into the Compliance Plan through the

Settlement?

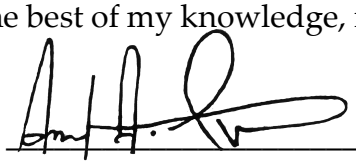
A33. Each of the five additional projects is undertaken in compliance with a federal mandate and the Settlement should be approved without modification.

Q34. Does this conclude your prepared settlement testimony?

A34. Yes.

VERIFICATION

I, Albert A. Stone, Vice President and General Manager for Northern Indiana Public Service Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.



Albert A. Stone

Date: June 7, 2018

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Northern Indiana Public Service Company
Pro forma Adjustment to Operations and Maintenance Expense
Twelve Months Ending December 31, 2018

This pro forma increases the twelve months ended December 31, 2016 O&M expenses for budgeted increases in transmission risk modeling expenses for the twelve months ending December 31, 2017.

Line No.	Description	Attachment 3-C Reference	Adjustment	Amount	Page Reference
	A	B	C	D	E
1	**Actual Expense - December 31, 2016**			$ -	
2	Pro forma adjustment to increase expenses for the twelve months ending December 31, 2017	OM 2 Matrix	OM 2D-17	300,000	
3	**Budgeted expenses for the twelve months ending December 31, 2017**			**$ 300,000**	[.2]
4	Pro forma adjustment to increase expenses for the twelve months ending December 31, 2018	OM 2 Matrix	OM 2D-18	-	
5	**Budgeted expenses for the twelve months ending December 31, 2018**			**$ 300,000**	[.2]

Northern Indiana Public Service Company
Transmission Risk Modeling

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Line No.	Description	Amount
	A	B
1	12/31/2017 Budget	$ 300,000 C, [.1]
2	Increase/Decrease for 12/31/2018 Budget	-
3	12/31/2018 Budget	$ 300,000 [.1]

	Decscription	Type	Unit Cost	Count/Hrs	Duration	Cost
4						
5	Annual License Maintenance	Software	$ 99,900 D	1	1	$ 99,900
6	Vendor other support	Services - External	$ 100 [.3]	80	12	96,000
7	Prof. Services / Must have enhancements	Services - External	$ 172 [.4]	20	12	41,280
8	Infrastructure Support	Hardware	$ 112,428 B	1	1	112,428
9	Subtotal					$ 349,608
10	30% Contingency					104,882
11	Total NiSource Expense					$ 454,490
12	NIPSCO % of NiSource Costs					67.23% A
13	NIPSCO Projected Expense					$ 305,551
14	NIPSCO Budgeted Expense					300,000 C
15	Variance					**(5,551)**
16	NIPSCO Transmission Assets (665 mile)					665.7 [.5]
17	NiSource Transmission Assets (990 miles)					990.2 [.5]
18	NIPSCO % of NiSource Costs					67.23% A

	Infrastructure Support Breakdown	
19		
20	Server Costs	
21	Monthly RU for 1 Small WinTel Physical Server	$ 111
22	Web Server Image	581
23	150 GB Per Server	150
24	Total monthly cost	$ 842
25	Cost for 4 (2 App Prod, 2 Web Prod)	$ 3,368
26	Monthly RU for 1 Small WinTel Physical DB Server	$ 111
27	DB Server Image	738
28	1 TB Storage	590
29	Total Monthly Cost	$ 1,439
30	Cost for 2 (Active / Passive)	$ 2,878
31	Monthly Prod Env Cost (Line 27 + Line 33)	$ 6,246
32	Annual Cost (Monthly Prod Env Cost X 12)	$ 74,952
33	2 Additional Envs. Test & Dev (50% of Annual Cost of Prod)	37,476
34	**Total Annual cost for Prod and Test/ Train and Dev Env**	**$ 112,428** B

	Annual License Maintenance Breakdown	**Total**
35		
36	Facility Explorer	$ 22,500.00
37	DataFrame Loader	13,500
38	DataFrame Data Maintenance	9,900
39	RiskFrame Modeler (TIMP)	11,700
40	RiskFrame Modeler (MAOP)	14,400
41	RiskFrame HCA	13,500
42	DataFrame ASG	14,400
43	**Annual License Maintenance Subtotal**	**$ 99,900.00** D

Northern Indiana Public Service Company
OM: Transmission Risk Modeling
Vendor Hourly Rate Support

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Rate Card

Resource Type	Resource Description	Level	Hourly Rate	
Project Manager	Project Managers provide overall leadership for a Project. A PM facilitiates the identification of functional and non-funtional requirements, performance specifications and business expectations. They develop schedules, milestones, resource requirements and staffing plans to achieve project deliverables. A PM allocates tasks among team members and assesses team progress toward project objectives. They monitor progress, recognize and help resolve technical and project related problems. They serve as the primary point of contact with business management. Work with the NiSource Project Management Office (PMO) to provide standardized status reports and briefings. They assure recognition of project changes and execution of related change control procedures. They manage the project resources, including customer and contractor as required and follow NiSource's Project Management Methodologies (PMM) requirements and utilize NiSource's PMO processes and reporting.	Intermediate (4-9 years experience)	$100	[.2]
		Advanced (10-15 years experience)	$120	
		Expert (16+ years experience)	$135	
Business Analyst	A Business Analyst may provide support to a project and or business function. The Business Analyst must have product, technology, or industry-related specialized skills and must have substantial process and workflow experience in a given business function. The person in this role must also demonstrate knowledge of best practices, must have the ability to understand and create proposals from gathered business requirements, have experience using tools to analyze, design, and implement specifications. This position may require knowledge across several platforms, processes or architectures or be recognized with speciality in a given area or discipline.	Intermediate (4-9 years experience)	$87	
		Advanced (10-15 years experience)	$98	
		Expert (16+ years experience)	$106	
Infrastructure, Solution and Data Architects	The Architect role regardless of focus area (infrastructure, solution, data etc.) will participate in setting direction and supporting the strategic and operational Enterprise Architect Strategies and initiatives. In addition to following NiSource policies and procedures, principal accountabilities include, but are not limited to: accountability for a specific engineering platform product, including planning, testing, deployment, service and support, enhancements, and product retirement; providing input into product plans for platform area; using performance metrics and tools to ensure maximum reliability and availability of platform resources; enforcing guidelines for approved platform-specific products including security solutions across the platform; participating in providing engineering, development, deployment, and support for worldwide IT organization; and communicating to management how changes in the Infrastructure environment impact their existing platforms.	Intermediate (4-9 years experience)	$100	
		Advanced (10-15 years experience)	$120	
		Expert (16+ years experience)	$135	
Application Developer	System programming is a trained professional staff capable of performing system software programming for systems and networks and to perform a variety of software support functions pertaining to third party-supplied or NiSource developed system software and program products. This role also includes the analysis of the problems and developing cross platform programs, supporting Operating Systems which will include MVS, UNIX, Microsoft Windows, and Linux, as well as having knowledge in languages which include but are not limited to, COBOL, JAVA , .Net, Powerbuilder.	Intermediate (4-9 years experience)	$80	
		Advanced (10-15 years experience)	$92	
		Expert (16+ years experience)	$100	
Testing Lead/Coordinator	Test Lead is responsible for all testing activities within a project from strategy and plan to test execution to defect management. Responsibilities include: Understand and review the detailed requirements, raising clarifications to business as needed;Develop, publish and maintain project master test strategy;Develop, publish and maintain project master test plan;Define sequence of test execution activities and run plan;Review test artifacts for project covering end-to-end testing ;Manage defect lifecycle process for the project ;Monitor issue/risk/defect process to ensure that problems are fixed, retested, and closed according to the defect management strategy;Monitoring of daily testing progress and resource utilization;Leveraging testing tools such as HP ALM and SharePoint;Engaging other testing leads as needed (Performance Lead and Automation Lead) and coordinate efforts;Provide project level test metrics and reports;Work with Project Manager to provide regular progress/status reports, and escalate risks and issues.	Intermediate (4-9 years experience)	$96	
		Advanced (10-15 years experience)	$98	
		Expert (16+ years experience)	$113	
PMO Analyst	A PMO Anaylst may participate within multiple project teams to provide administrative assistance in developing the weekly status reports and PMO metrics. The Analyst will also provide weekly support for the other PMO processes throughout the life cycle of the project Or may work internally within the PMO to provide Program level reporting and or trend analysis	Intermediate (4-9 years experience)	$70	
		Advanced (10-15 years experience)	$80	
		Expert (16+ years experience)	$90	
Deployment Lead	A Deployment Lead needs a thorough knowledge of quality assurance methodologies and all phases of the systems development life cycle. The Lead should have experience in project implementations thru mocks and desktop reviews in planning for major systems implementations. The Lead will be responsible for both the technical implementation plan and the business implementation plan and both need to be executed concurrently in order for a smooth implemntation. It is necessary that the Lead also have an understanding of a phased implementation vs. pilot vs. cut-over implementation and have good solid planning, organizing and communications skills.	Intermediate (4-9 years experience)	$98	
		Advanced (10-15 years experience)	$104	
		Expert (16+ years experience)	$109	

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Vendor Hourly Rate Support

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Application Architect	Designs applications that comprise end to end custom development solutions which run on multiple platforms and may be composed of multiple Software packages. This role is responsible for performance, availability and scalability of the applications, and maintains the functional interface to the application infrastructure. Designs applications which may run on multiple platforms and may be composed of multiple Software packages.	Intermediate (4-9 years experience)	$105
		Advanced (10-15 years experience)	$125
		Expert (16+ years experience)	$142
Program Manager	Has overall responsibility for Project proposal development, Project Management and delivery through all Project phases. Develops proposals and Project estimates and conducts Project quality reviews. Performs issue and risk management activities. Uses tools to forecast, plan, estimate and track Project work across multiple Projects. Provides oversight for performance, cost, scope, schedule and quality to Project Managers and account leadership. Leads the program to produce the agreed upon solution deliverables in accordance with the applicable timeframes. Executes a wide range of process activities beginning with the requirements definition and continuing through development, test and final delivery. Manages relationship between Customer, Third Party Providers and Service Provider Personnel. Coordinates and provides status reporting on the stability of the program oriented work efforts and implementation of PMO aligned processes and methodologies. Has responsibility for determining and communicating team assignments and directing and monitoring work efforts. Provides status to Service Provider / Customer leadership teams on potential impacts to scope, budget, risk and resources.	Intermediate (4-9 years experience)	$120
		Advanced (10-15 years experience)	$135
		Expert (16+ years experience)	$162
Test Analyst/Tester	Test Analyst is responsible for the design, documentation, creation, and execution of functional testing of an application leveraging testing tools such as HP ALM. Other responsibilities include: Understand and review assigned requirements, raising clarifications to business as needed;Provide input on estimates and schedules to test lead for planning purposes;Write test cases ensuring requirements coverage and traceability;Update and maintain existing test cases as changes are made to requirements and the application;Execute tests per the test plan and schedule as directed by the test lead; Document test results and enter defects into the defect management system;Work with business analysts and developers to understand, fix, retest and close reported defects;Tester has 0 – 2 years' experience; operates under direction of Test Analyst or Test Lead to review requirements, write test cases, execute test cases, report defects and work with development staff to resolve defects.	Intermediate (4-9 years experience)	$65
		Advanced (10-15 years experience)	$70
		Expert (16+ years experience)	$78
Training Coordinator	Provides training best practices; ensures training is alilgned with Project goals; develops training plan and approach; develops training material; oversees training activities, training execution and training effectivness. Organizes and conducts training and educational programs; develops training curriculum; corrdinates and schedules training activities; maintains records of training activities.	Intermediate (4-9 years experience)	$80
		Advanced (10-15 years experience)	$90
		Expert (16+ years experience)	$96
Consultant	This position is designed for those who have extensive industry experience with process development and improvement. The consultant will work directly with the Customer and Service Provider teams and provide the applicable deliverables. Tasks will be at a subordinate level to a Senior Consultant although centered on similar areas of subject matter expertise. This will not be a team leader or a co-process owner position. However he/she may for short periods of time perform such duties. This position will be functional, including performing meeting coordination, presentation preparation and research of best practices. The key competency may include functional business expertise or technology experience (e.g., web architecture and identity management).	Intermediate (4-9 years experience)	$99
		Advanced (10-15 years experience)	$120
		Expert (16+ years experience)	$135

Workpaper OM 2D
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Northern Indiana Public Service Company
OM: Transmission Risk Modeling
Professional Services
Hourly Rate Support for Strategic IT Projects

Line No.	2017 Strategic IT Projects [1]	Sum of Total Hours	Sum of Total Cost	Average Rate of Project	
1	CDR	4,027	$ 553,899	$ 138	
2	GPS	3,612	509,310	$ 141	
3	NIPSCO Electric	686	90,185	$ 132	
4	Planning & Budgeting - 1	13,436	2,336,473	$ 174	
5	Planning & Budgeting - 2	14,077	2,663,410	$ 189	
6	**Grand Total**	**35,836**	**$ 6,153,276**	**$ 172**	[.2]

Footnote 1: Information excludes certain vendors

Workpaper OM 2D
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Northern Indiana Public Service Company
OM: Transmission Risk Model Expense
Miles of Transmission Line

Line No.	Company	Total Miles	
	A	B	
1	NIPSCO	665.7	A [.2]
2	COH	131.7	
3	CVA	67.4	
4	CPA	61.4	
5	CKY	57.2	
6	CMD	4.9	
7	CMA	1.9	
8	**Total**	**990.2**	[.2]

9	Line Section	Length (Mi)	Line Section	Length (Mi)	Line Section	Length (Mi)	Line Sectio	Length (Mi)	Line Sectio	Length (Mi)
	C	D	E	F	G	H	I	J	K	L
10	10-108	0.010015152	16-125	6.109693182	20-118	0.049419	30-103	0.485191	6-176	0.850617
11	10-109	0.009564394	16-126	4.188268939	20-119	6.069497	30-104	2.474078	6-182	2.170381
12	10-136	3.385632576	16-127	7.908225379	20-120	10.80763	30-105	0.145899	6-183	3.811929
13	10-NT100	0.535227273	16-128	5.4108125	20-121	5.099811	30-106	5.78629	6-199	0.023485
14	10-NT101	1.272159091	16-129	6.748897727	20-122	1.553833	30-107	4.0185	6-201	0.024511
15	10-NT102	0.012878788	16-130	7.607221591	20-123	4.401375	30-108	11.16289	6-202	0.030114
16	10-NT103	0.20094697	16-131	5.27410322	20-124	7.723879	30-109	8.611377	6-MS100	1.067235
17	10-NT104	0.172916667	16-137	4.95285947	20-125	2.398487	30-110	6.76446	6-MS101	0.153409
18	10-NT105	0.81344697	16-138	4.227982955	20-126	6.27603	30-111	7.292055	6-NT100	0.012311
19	10-NT106	0.21875	16-139	2.847560606	20-129	4.574708	30-112	6.503468	6-NT101	0.017992
20	10-NT107	1.040151515	16-140	6.055681818	20-130	0.151581	30-113	7.438189	6-NT102	0.435038
21	10-RC103	0.066907197	16-141	0.255969697	20-131	4.680669	30-114	9.811307	6-NT103	0.374432
22	10-ST100	1.292045455	16-142	0.041107955	20-132	0.142424	30-115	0.621445	6-NT104	0.008523
23	10-ST101	1.520265152	16-143	1.633522727	20-136	1.545424	30-116	10.67355	6-NT105	0.011364
24	12-100	2.702831439	16-144	4.351596591	20-137	4.8726	30-117	11.63494	6-NT106	0.011364
25	12-101	1.759935606	16-145	0.071795455	20-138	0.439063	30-118	0.093943	6-NT107	0.120644
26	12-102	0.169020833	16-147	1.285981061	20-NT100	0.335417	30-119	10.41173	6-NT108	0.468561
27	12-124	3.362988637	16-148	3.661395833	20-RC109	0.024902	30-120	6.334788	6-NT109	0.014205
28	12-125	8.179710227	16-149	1.622234848	22-100	6.826639	30-121	1.978972	6-NT110	1.085795
29	12-128	6.390534091	16-150	0.257363636	22-101	0.617443	30-122	5.571422	6-NT111	0.005303
30	12-133	2.14905303	16-151	1.511679924	22-102	3.600136	30-123	9.955216	6-NT112	0.017045
31	12-139	0.005905303	16-152	0.043941288	22-103	9.433036	30-124	4.202576	6-NT113	0.120455
32	12-162	1.065145833	16-153	0.033768939	22-104	6.849063	30-125	4.9806	6-NT114	0.002273
33	12-163	1.307418561	16-154	0.042460227	22-105	2.542358	30-126	3.298099	6-NT115	0.00322
34	12-164	0.024594697	16-155	0.177170455	22-106	10.74599	30-127	11.1809	6-NT116	0.500568
35	12-167	0.001325758	16-157	5.076704547	22-108	5.558794	30-128	8.626105	6-NT117	0.010417
36	12-168	0.007954545	16-158	5.307291667	22-109	3.492123	30-129	7.049064	6-NT118	0.042045
37	12-MS100	0.796022727	16-159	6.52961553	22-110	1.21272	30-130	8.742872	6-NT119	0.002462
38	12-MS101	0.483712121	16-163	1.161208333	22-111	1.055045	30-131	7.128621	6-NT120	0.960795
39	12-MS102	0.771022727	16-168	3.49999053	22-112	4.161661	30-RC107	0.084271	6-NT121	0.009848
40	12-MS103	1.191666667	16-169	1.035882008	22-114	2.377667	36-100	0.900294	6-NT122	0.015909
41	12-NT100	0.21969697	16-GC101	0.675171212	22-115	0.642856	36-101	2.495915	6-NT123	0.027462
42	12-RC104	0.014189015	16-GC102	0.903219697	24-100	4.604002	36-102	1.732136	6-NT124	0.039205
43	16-100	2.189409091	16-GC103	0.98125	24-101	7.78804	36-103	4.087439	6-NT125	0.030682
44	16-101	4.096030303	16-GC104	0.523863636	24-102	5.973636	36-104	3.926981	6-NT126	0.595644
45	16-102	4.544919508	16-NT100	0.029545455	24-103	6.846777	4-136	4.280624	6-NT127	0.065152
46	16-103	5.929972917	16-NT101	0.244507576	24-104	5.119466	4-157	0.224093	6-NT128	0.238258
47	16-104	6.623354167	16-RC104	0.068399621	24-105	5.076521	4-206	0.100604	6-NT129	0.496591
48	16-105	0.129747159	16-RC105	0.148338826	24-106	0.035161	4-BD20	0.027525	6-NT130	0.415152
49	16-106	4.643602273	16-RC108	0.021475379	24-107	4.418549	4-BD24	0.025392	6-NT131	0.768371
50	16-107	4.9839375	16-RC114	0.099933712	24-108	4.67482	4-MS100	0.755682	6-ST101	0.498106
51	16-111	4.092147727	16-RC117	0.019507576	24-109	2.74329	4-MS101	0.314394	6-ST102	0.919318
52	16-112	6.913869318	16-RC118	0.019333333	24-110	0.29833	4-MS102	0.648864	8-160	0.041902
53	16-114	4.464912879	20-107	3.078918562	24-111	0.081242	4-MS103	0.411364	8-164	0.130871
54	16-115	4.628596591	20-108	6.76392803	24-112	2.781818	4-MS104	0.47803	8-165	2.101706
55	16-116	3.001204545	20-109	3.956460227	24-114	1.434219	4-MS105	0.252652	8-172	3.712307
56	16-117	0.134136742	20-110	5.539772727	24-NT100	0.982197	4-MS106	0.244886	8-184	0.02803
57	16-118	0.100645833	20-111	5.579005682	24-RC100	0.082008	4-MS107	0.026326	8-186	1.935038
58	16-119	2.070005114	20-112	6.66754735	24-RC102	0.079935	4-MS108	0.218371	8-BD30	0.02667
59	16-120	4.072183712	20-113	3.799392045	24-RC103	0.275738	4-MS109	0.22803	8-MS100	0.515152
60	16-121	0.229814962	20-114	4.712931818	24-RC106	0.077113	4-MS111	0.255492		
61	16-122	2.299725379	20-115	0.028689394	24-RC110	0.204272	4-MS114	0.114962	**Total Miles**	**665.7** A
62	16-123	5.575126894	20-116	1.009887689	24-RC111	0.086621	4-NT100	0.608902		
63	16-124	3.660246212	20-117	1.093916667	30-100	0.529981	6-156	0.434326		

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Northern Indiana Public Service Company
Pro forma Adjustment to Operations and Maintenance Expense
Twelve Months Ending December 31, 2018

This pro forma increases the twelve months ended December 31, 2016 O&M expenses for budgeted increases in legacy cross bore expenses for the twelve months ending December 31, 2017 and December 31, 2018.

Line No.	Description	Attachment 3-C Reference	Adjustment	Amount	Page Reference
	A	B	C	D	E
1	**Actual Expense - December 31, 2016**			$ -	
2	Pro forma adjustment to increase expenses for the twelve months ending December 31, 2017	OM 2 Matrix	OM 2F-17	368,000	
3	**Budgeted expenses for the twelve months ending December 31, 2017**			**$ 368,000**	[.2]
4	Pro forma adjustment to increase expenses for the twelve months ending December 31, 2018	OM 2 Matrix	OM 2F-18	438,200	[.2]
5	**Budgeted expenses for the twelve months ending December 31, 2018**			**$ 806,200**	[.2]

Northern Indiana Public Service Company
Legacy Cross Bore Ins.
Twelve Months Ending December 31, 2018

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Line No.	Description	Amount		
	A	B		
1	12/31/2017 Budget	$ 368,000	A	[.1]
2	**Increase/Decrease for 12/31/2018 Budget**	438,200		[.1]
3	12/31/2018 Budget	$ 806,200	B	[.1]

4 **Support:**

2017

Description	Miles	Feet / FTE	Cost Per		Total
Camera	13	68,640	$1.73	[.3]	$118,794
Cross Bore Specialist - Program Development and Communication		1	$92,000	[.4]	$92,000
Cross Bore Materials - Program Development and Communication					$10,000
Compliance Administrator		1	60,000	[.5]	$60,000
Project Specialist		1	87,000	[.6]	$87,000
Total for 2017					**$367,794**
Budgeted Amount					**$368,000** A
Variance					**$206**

2018 and Ongoing

Description	Miles	Feet	Rate (per mile)		Cost	
Camera	59	311,520	$1.73	[.3]	$539,142	
Cross Bore Materials - Program Development and Communication					$10,000	
Outside Services Subtotal					$549,142	
Inflation Adjustment					2.0%	[.8]
Outside Services Total					**$560,125**	
Cross Bore Specialist - Program Development and Communication		1	92,000	[.4]	$92,000	
Compliance Administrator		1	60,000	[.5]	$60,000	
Project Specialist		1	87,000	[.6]	$87,000	
Labor Subtotal					**239,000**	
Merit Adjustment					3.0%	[.7]
Labor Total					**246,170**	
Total for 2018					**$806,295**	
Budgeted Amount					**806,200**	B
Variance					**(95)**	

Northern Indiana Public Service Company
OM-Legacy Cross Bore
Camera Cost Per Foot

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Line No.	A	B
1	Total Camera Costs	$1,727,953 A
2	Invoice Feet	1,018,391 B
3	Total 2016 Cost per Foot	$1.70 =A/B
4	Inflation Adjustment	2.00% [.8]
5	2017 Camera Cost	$1.73 [.2]

2016 Cross Bore Camera Project
PROJECT ID 16-34873

	INVOICED $	# Laterals Cameraed	Lateral Footage Camaraed*	Sanitary Footage Cameraed	Sanitary Footage Invoiced*	Storm Footage Cameraed	Storm Footage Invoiced*	# Push Cams	Push Cam Footages*	Hours Jetted	Jetted Footages**	Hours Vactored	TOTAL FEET CAMARAED	TOTAL MILES CAMARAED
	C	D	E	F	G	H	I	J	K	L	M	N	O	P
6	$133	0	0	0	0	0	0	1	102	0	0	0.0	102	0.0
7	$400	0	0	0	0	0	0	3	255	0	0	0.0	255	0.0
8	$133	0	0	0	0	0	0	1	60	0	0	0.0	60	0.0
9	$24,744	139	4,248	2,742	198	469	469	3	103	0	0	0.0	7,562	1.4
10	$46,774	218	11,960	7,103	909	5,150	5,150	10	402	0	0	3.0	24,615	4.7
11	$93,923	294	13,524	8,360	584	23,856	23,856	99	3,771	0	0	0.0	49,511	9.4
12	$44,720	230	10,686	7,433	330	4,813	4,813	2	157	1	100	0.0	23,189	4.4
13	$34,072	127	5,118	4,468	615	5,694	5,694	23	380	0	0	6.0	15,660	3.0
14	$19,105	82	2,268	2,654	265	3,757	3,757	0	0	0	0	0.0	8,679	1.6
15	$26,051	76	3,716	4,259	2,785	4,563	4,563	28	1,239	0	0	1.5	13,777	2.6
16	$52,281	123	6,739	14,233	4,036	13,307	13,307	66	4,438	0	0	2.0	38,717	7.3
17	$121,565	521	26,087	19,731	858	14,196	14,196	121	2,805	0	0	0.0	62,819	11.9
18	$28,439	65	3,540	7,352	2,041	7,396	7,396	39	1,548	0	0	0.0	19,836	3.8
19	$46,896	165	7,347	12,312	2,820	8,250	8,250	40	1,505	0	0	0.0	29,414	5.6
20	$96,209	406	26,182	13,333	4,695	7,425	7,425	59	1,702	4	400	0.0	49,042	9.3
21	$30,538	104	6,829	8,143	1,333	7,542	7,542	14	628	0	0	0.0	23,142	4.4
22	$16,912	53	3,241	5,449	1,013	4,815	4,815	5	130	0	0	0	13,635	2.6
23	$55,632	116	6,776	10,976	2,892	18,276	18,276	60	2,367	0	0	4.0	38,395	7.3

Northern Indiana Public Service Company
OM-Legacy Cross Bore
Camera Cost Per Foot

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2016 Cross Bore Camera Project
PROJECT ID 16-34873

	INVOICED $	# Laterals Cameraed	Lateral Footage Camaraed*	Sanitary Footage Cameraed	Sanitary Footage Invoiced*	Storm Footage Cameraed	Storm Footage Invoiced*	# Push Cams	Push Cam Footages*	Hours Jetted	Jetted Footages**	Hours Vactored	TOTAL FEET CAMARAED	TOTAL MILES CAMARAED
	C	D	E	F	G	H	I	J	K	L	M	N	O	P
24	$22,941	106	4,680	1,579	731	2,108	2,108	3	80	0	0	4	8,447	1.6
25	$55,349	270	10,968	8,427	2,108	3,949	3,949	23	438	0	0	0.0	23,782	4.5
26	$47,100	218	14,486	12,880	275	6,088	6,088	18	562	0	0	0.0	34,016	6.4
27	$28,188	125	4,863	7,276	633	5,152	5,152	47	1,900	0	0	0.0	19,191	3.6
28	$5,727	0	0	11	0	1,459	1,459	5	275	0	0	0.0	1,745	0.3
29	$8,536	23	1,231	1,726	70	2,899	2,899	5	258	0	0	0.0	6,114	1.2
30	$10,816	34	1,836	3,244	898	1,606	1,606	15	1,007	0	0	0	7,693	1.5
31	$10,597	38	2,122	2,905	259	1,786	1,786	12	590	0	0	0.0	7,403	1.4
32	$243,618	826	48,483	45,928	4,019	50,640	43,363	226	7,767	0	0	0.0	152,818	28.9
33	$74,968	246	9,386	15,122	4,044	17,156	16,569	107	4,036	0	0	0.0	45,700	8.7
34	$23,982	67	2,702	4,667	377	7,297	7,297	21	605	0	0	0.0	15,271	2.9
35	$13,317	15	1,173	3,972	1,465	4,818	4,818	11	412	0	0	0.0	10,375	2.0
36	$4,559	16	681	1,244	271	0	0	11	622	0	0	0.0	2,547	0.5
37	$16,599	73	4,311	4,754	444	1,294	1,294	18	631	0	0	0.0	10,990	2.1
38	$371	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
39	$33,404	160	7,984	5,071	622	3,633	3,633	3	102	0	0	5.0	16,790	3.2
40	$10,317	38	1,468	1,139	47	1,607	1,607	7	201	0	0	4.0	4,415	0.8
41	$30,030	126	5,267	6,592	313	3,805	3,805	26	1,223	0	0	2.0	16,887	3.2
42	$3,004	5	325	283	0	0	0	0	0	0	0	6.0	608	0.1
43	$84,948	372	12,216	14,856	838	9,012	9,012	70	2,964	0	0	3.0	38,794	7.3
44	$231,355	859	43,681	54,376	3,218	42,760	42,760	204	8,584	0	0	5.0	149,401	28.3
45	$24,175	45	1,064	3,998	2,031	7,348	7,348	29	1,087	0	0	2.0	13,497	2.6
46	$5,526	45	1,064	3,998	2,031	7,348	7,348	29	1,087	0	0	2.0	13,497	2.6
47	**$1,727,953**	**6,426**	**318,252**	**332,596**	**50,068**	**311,274**	**303,410**	**1,464**	**56,023**	**5**	**500**	**49.5**	**1,018,391**	**192.9**
	A			**A**									**B**	

* Invoiced as Each ** Invoiced as Hourly Rate

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Northern Indiana Public Service Company
OM: Legacy Cross Bore Expense
Cross Bore Specialist

Salary Range for this position is $69,178-$115,296.

Job Title: NIS - Sr Operations Support Specialist
Job ID: 918109
Location: VA-Chester
Regular/Temporary: Regular

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Location Information

The location of this position is in the Southern Region of the Columbia Gas of Virginia operating territory which includes the Chester and Suffolk, VA locations.

Responsibilities

Lead efforts to provide technical and leadership support to the Operation Centers/Functions requiring demonstrated interpersonal skills, problem solving, evaluation, and business case development and implementation. Assist with mentoring local leadership and working with key stakeholders to facilitate the completion of strategic operation activities, e.g. long term sourcing, annual Work Force Transition Plan, Work Plan, Operating Budget, etc. Work closely with key partners that support or are supported by the Op Centers/Functions to ensure communication and implementation of safety initiatives are complete and effective.

Principal Duties and Responsibilities:

- Lead process improvement projects/teams focusing on Work Execution, Employee Engagement, Development and Performance Management, and Continuous Improvement and Standardization as needed.
- Deliver subject matter expertise in collaboration with operations management to implement initiatives that achieve strategic objectives.
- Ensure coordination of field operations compliance programs, including monitoring and evaluating for compliance with Policies/Procedures and federal/state regulations.
- Analyze, recommend and implement solutions as needed to address operational problems.
- Evaluate operations to ensure compliance to State/Federal regulations and Policy/Procedure, including enforcement of Company safety procedures.
- Foster internal customer satisfaction.
- Team with leaders throughout the organization to help identify/assist in development of common training initiatives.
- Lead, participate and ensure compliance in the design and rollout of new operations technologies, processes, and policies.
- Other duties as assigned.

Selection Criteria

Required for Selection:

Please respond to each of the criteria in a detailed fashion and provide specific examples that demonstrate how your skills, abilities, and work experience meet the position's requirements.

Required for Selection:

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Northern Indiana Public Service Company **Page [.4]**
OM: Legacy Cross Bore Expense
Cross Bore Specialist

- Working knowledge of operations policies and procedures, and applicable federal, state and local codes/regulations.
- Experience utilizing operations support systems, including WMS and DIS (or equivalent).
- Demonstrated effective written and oral communication skills that result in clear, concise, and positive communications.
- Strong problem solving and decision making skills.
- Five years' experience in natural gas distribution field operations.
- Experienced in data gathering & analysis.
- Experience with PC based systems, including Word and Excel, to create memos and spreadsheets containing basic mathematical formulas.
- Demonstrated skill in independently organizing, scheduling and planning work
- Demonstrated success with initiating action.

Preferred for Selection:

- Demonstrated facilitation skills.
- Experienced with the effective delivery of training & evaluation programs.
- Supervisory experience or demonstrated leadership skills.
- Experience in leading project management teams.
- This position may require periodic travel and overnight stay as necessary to support the company.

Compliance Administrator - #340507

Salary Range: $44,899 - $74,832

Provide analytical and administrative support for the Columbia Gas of Ohio, Inc. (COH) Cross Bore Safety Initiative

- Assimilate and analyze various data points from a variety of sources to support the COH Cross Bore Safety Initiative Program Specialist.
- Responsible for compiling scorecards/performance metrics.
- Prepare a variety of reports and conduct basic analysis using PC and mainframe programs.
- Assist COH Cross Bore Safety Initiative Program Specialist with reporting and data collection
- Perform routine administrative activities such as schedule management, making travel arrangements, processing invoices, staging meetings, etc.
- Set-up pre-implementation communication meetings with local municipalities and their contractor to discuss risk-based model findings
- Responsible for departmental data base development and support including data conversions, maintenance and analysis
- Administer special invoicing & budget tracking.
- Responsible for supply ordering, purchasing card management and accounting code usage.
- Develop and maintain service-focused working relationships with Operations partners
- Responsible for Quality Assurance and control of all recordkeeping associated with cross bore investigations and create reports as needed

Qualifications:

Key Work Experience / Education Required for selection:

- 3 years of administrative support experience
- Demonstrated leadership experience with complex programs and projects
- Experience in the natural gas operations (plant, construction, or training programs)
- High school diploma or equivalent

Preferred for Selection:

- Associate degree or higher in business administration or technical field
- Prior work experience in compliance with state and federal regulations
- Previous experience working in utility industry
- Experience with Lotus Notes mail and database functions
- Working knowledge or operations support systems (e.g., Workbrain, Expense Reporting System, Work Management, DIS, etc.)

Technical/Functional Competences:

Required for selection:

- Broad knowledge and experience in operations
- Proficient with Microsoft Word, Excel, PowerPoint
- Demonstrated skills in preparing spreadsheets, reports and presentations
- Strong interpersonal skills
- Demonstrated written and oral communication skills
- Strong organizational and planning skills

General/Transferable Competencies

Required for Selection:

- Contributes to Team Success
- Demonstrates Adaptability and Flexibility
- Collaborates Effectively
- Demonstrates High Work Standards with a Quality Orientation
- Acts with a Sense of Urgency
- Planning and Organizing

- Value inclusion within your day to day responsibilities by respecting others' perspectives/convictions, engaging others' opinions, creating a safe environment where people, ideas, and opinions are valued within your Team/Customers and external partners.
- Respect and take into consideration diversity within your Team/Customers and external work partners by valuing different world views, challenges, and cultures that represent all walks of life and all backgrounds.
- Treat others with respect and consideration. Actively participate in creating and contributing to a positive work environment.
-
- Promote a safe work environment by actively participating in all aspects of our employee safety program. Report any unsafe conditions and take actions to prevent personal injuries. Support our interdependent safety culture by ensuring the safety of your co-workers. Stay focused on the task at hand and promote productivity through good work habits.

Project Specialist 1 - #103887

Salary Range: $54,000 - $90,000

Responsibilities
PURPOSE: Support the estimation, design, scheduling, planning, contractor facilitation, and project management of extraordinary gas distribution facilities and high profile projects requiring specialized project management. Ensures projects are constructed in accordance with all applicable requirements, ensuring safe, reliable service to customers in an efficient, economical manner. Collaborate and strategize with peers within NiSource companies and in industry to ensure cost-effective project management.

KEY RESULTS:

- Safe/efficient high-quality construction work that complies with policies, practices, and standards.
- Collaboration between project specialists, project managers and contract construction inspectors.
- All internal/external customer responsive construction support.
- Complete construction projects which meet customer expectations and budget requirements.
- Relationships with external municipalities and local authorities.
- Timely and accurate invoice payments to contractors.
- Effective team relationships throughout field and State staff functions.

ESSENTIAL FUNCTIONS

- Supports the management of capital construction, improves capital spending efficiency and return on invested capital.
- Implements best practices while driving functional consistency, process standardization and operational excellence.
- Supports a project management and planning culture.
- Promotes the necessary environment for effective internal customer satisfaction and collaboration.
- Partners with Field Operations, Sales, and other Technical Operations functions to meet strategic goals and objectives.
- Assures activities and processes are implemented to ensure the safe, reliable and cost effective delivery of services.
- Effective use of technology, tools and planning techniques to improve process results.
- Fosters and promotes valued relationships with government entities, industry associates, company affiliates, and contractors.
- Promotes and assures safe working environment and public safety.
- Executes construction and engineering services strategies.
- Supports the implementation and management of pipeline construction contracts.
- Ensures timely and accurate invoice payments to contractor.
- Monitors appropriate contractor qualifications and certifications and ensures proper documentation
- Assists in establishing and monitoring contractor performance metrics.
- Collaborates with peers to ensure operating standards and construction practices comply with policies and procedures.
- Ensures adherence to design and strategic construction objectives.
- Ensures the implementation/tracking of major construction projects, material acquisition, material design, project design and construction management including adherence to designs and permits such as construction, environmental, etc.
- Maintains relationships with fabricators, equipment vendors and manufactures, evaluate

equipment and material costs to insure value.
- Interacts with other business units including sales, economic development, finance, M&R design, engineering, survey & land, SCADA, and M&R mechanics.
- Must have the ability to work on projects within all NiSource Distribution Operations territories.

Education Level

Key Work Experiences/Education	

Required for Selection:

- High school diploma or equilavent
- Minimum of five (5) years experience working with pipeline contractors.
- Demonstrated strong knowledge of construction practices with experience leading projects.
- Demonstrated skill in utilizing cost/benefit analysis with quantitative and/or qualitative data to recommend best option/choice/alternative.
- Demonstrated ability to work collaboratively with various individuals and functions across the organization.
- Demonstrated strong negotiating and influencing skills.

Preferred for Selection

- Supervisory experience
- Associates Degree in an engineering/technical cirriculum from an accredited university or college

Technical/Functional Competencies	

Required for Selection:

- Demonstrated knowledge of gas operations including gas flow, construction, contracts and emergency response.
- Knowledge of local, state, and federal operating codes.
- Strong knowledge of policies, procedures, and standards pertaining to construction, inclusive of safety policies and procedures.
- Demonstrated strong knowledge of capital budgets and working knowledge of O & M budgets.
- Valid Driver's License
- Proficiency with personal computers

Preferred for Selection:

- Working knowledge of operations support systems, i.e. WMS, etc.
- Construction Inspection/Welding experience

Other Information

Promote a safe work environment by actively participating in all aspects of our employee safety program. Report any unsafe conditions and take actions to prevent personal injuries. Support our interdependent safety culture by ensuring the safety of your co-workers. Stay focused on the task at hand and promote productivity through good work habits.

Inclusion & Diversity

Value inclusion within your day to day responsibilities by respecting others' perspectives/convictions, engaging others' opinions, creating a safe environment where people, ideas, and opinions are valued within your Team/Customers and external partners.

Respect and take into consideration diversity within your Team/Customers and external work partners by valuing different world views, challenges, and cultures that represent all walks of life and all backgrounds.

Treat others with respect and consideration. Actively participate in creating and contributing to a positive work environment.

How To Apply

For immediate consideration, please apply on-line at www.nisource.jobs on or before February 9th!

Equal Employment Opportunity

NiSource companies are Equal Employment Opportunity (EEO) employers and do not discriminate in any employer/employee relations based on race, color, religion, sex, marital status, sexual orientation, national origin, age, disability, veteran status, or other characteristic protected by law. NiSource companies require all employees to adhere strictly to this policy.

Project Specialist 2 - #104372

Salary Range: $72,115 - $120,191

Introduction

NiSource Gas Distribution is actively working to design improvements in both its technical training and its Operator Qualification Programs. In that transition period, this position leads efforts in all NGD companies as a key Subject-Matter-Expert advising change teams on key design and implementation issues. This position will require collaboration and facilitation on issues assuring understanding of all elements of the enhanced OQ program among internal and external parties **with a strong focus on Construction stakeholders**. Establishing and building key strategic relationships with vendors and industry associations will be essential. Leading the troubleshooting of start-up issues will be the responsibility of this position.

Location Information

This position may report to any locations within the Columbia Gas footprint.

Responsibilities

Responsibilities: Provide centralized oversight and administration of NiSource NGD Operator Qualification (OQ) Programs to ensure compliance with Federal OQ rule. Advise and provide consultation to internal and external stakeholders on OQ requirements and guidelines.

- Drive improvement of the current OQ programs by facilitating elements of the design and the implementation of the enhanced OQ tasks, tests and skill evaluations.
- Provide strategic consultation on development of new enhanced OQ to Pipeline Safety & Compliance leadership, Technical Training and Health, Safety & Environmental teams.
- Assist through facilitation and communication with the implementation of enhance OQ programs in all states
- Map and maintain processes to assure compliance and consistency.
- Actively seek and incorporate feedback from key stakeholders related to performance and support.
- Maintenance of service-focused working relationships with Operations & Construction partners.
- Represent Pipeline Safety & Compliance as a subject matter expert in support of regulatory filings and proceedings at state and federal level.
- Participate in processes to influence regulatory proceedings through industry associations and other opportunities.
- Build, promote and enhance collaborative relationships with Public Utility Commissions, industry associations, company affiliates and other potential business partners.
- Assist areas in preparation for Commission Audits.
- Collaborate with Pipeline Safety and Compliance Leaders, Training leaders, peers, local operations and construction partners to prepare preventative strategies to eliminate repeat offenses of non-compliance.
- Act as a Key Stakeholder on decisions to update company O&M policies and procedures. Collaborate with Gas Standards to issue Operational Notices to affected parties internal and external.
- Prepare and submit periodic mandated reports to external agencies.
- Align individual objectives with department goals and projects to ensure that corporate needs and objectives are met.
- Maintain awareness of decision-making impacts to capital and O&M budgets and recommend best cost alternatives to meet budgetary constraints.
- Attend conventions, conferences, etc., which relate to functions performed by the department.
- Provide seasoned operations consulting to Field Operations & Construction.

Qualifications

KEY WORK EXPERIENCES/ EDUCATION:

Required for Selection:

- 3 -5 years of Gas Operations experience
- Demonstrated experience developing/improving processes
- Demonstrated direct interface in providing support to commission audits and inquiries
- Demonstrated leadership experience over complex programs or projects
- Demonstrated understanding of tasks performed when operating & maintaining a natural gas distribution system
- Strong Microsoft Suite skills in Work, PowerPoint and Excel

Preferred for Selection:

- Bachelor of Science degree in business or engineering discipline
- Previous supervisory or management experience that demonstrates the required skills and competencies
- Demonstrated experience with integration of new technology into work processes

TECHNICAL/ FUNCTIONAL COMPETENCIES:

Required for Selection:

- Demonstrated knowledge of field operations Policies & Procedures, state and federal regulations (including DOT Pipeline safety Regulations 190,191, 192, 193 & 199).
- Working knowledge of standard NiSource PC software suite.
- Working knowledge of operations support systems. (Work Management System, Mobile Data Terminals, Timesheet systems, etc.)
- Strong interpersonal skills
- Demonstrated written and oral communication skills
- Strong organizational & planning skills

Preferred for Selection:

- Understanding of Plant and Service operations, maintenance and construction
- Understanding of state specific tariffs

Other Information

Promote a safe work environment by actively participating in all aspects of our employee safety program. Report any unsafe conditions and take actions to prevent personal injuries. Support our interdependent safety culture by ensuring the safety of your co-workers. Stay focused on the task at hand and promote productivity through good work habits.

Inclusion & Diversity

Value inclusion within your day to day responsibilities by respecting others' perspectives/convictions, engaging others' opinions, creating a safe environment where people, ideas, and opinions are valued within your Team/Customers and external partners.

Respect and take into consideration diversity within your Team/Customers and external work partners by valuing different world views, challenges, and cultures that represent all walks of life and all backgrounds.

Treat others with respect and consideration. Actively participate in creating and contributing to a positive work environment.

How To Apply

For immediate consideration, please apply on-line at careers.nisource.com on or before April 13th!

Equal Employment Opportunity

NiSource is committed to providing equal employment opportunities in each of its companies to all employees and applicants for employment without regard to race, color, religion, national origin or ancestry, veteran status, disability, gender, age, marital status, sexual orientation, gender identity, genetic information, or any protected group status as defined by law. Each employee is expected to abide by this principle.

By applying, you may be considered for other job opportunities.

Workpaper OM 2F
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Northern Indiana Public Service Company
OM - Legacy Crossbore
Non-Bargaining Unit Merit Adjustments

Line No.	A Description	B Merit %	
1	2016	3.00%	
2	2015	3.00%	
3	2014	3.00%	
4	2013	3.00%	
5	2012	3.00%	
6	Average	3.00%	**[.2]**

Northern Indiana Public Service Company **Workpaper OM 2F**
Bureau of Labor Statistics **Page [.8]**
CPI-All Urban Consumers (Current Series)
12-Month Percent Change

Line No.	A	B
1	**Series Id:**	CUUR0000SA0L1E
2	**Not Seasonally Adjusted**	
3	**Series Title:**	All items less food and energy in U.S. city
4	**Area:**	U.S. city average
5	**Item:**	All items less food and energy
6	**Base Period:**	1982-84=100
7	**Years:**	2007 to 2017

8	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
9	C	D	E	F	G	F	G	F	G	F	G	F	G	F	G
10	**2007**	2.7	2.7	2.5	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.4	2.4	2.3
11	**2008**	2.5	2.3	2.4	2.3	2.3	2.4	2.5	2.5	2.5	2.2	2.0	1.8	2.3	2.3
12	**2009**	1.7	1.8	1.8	1.9	1.8	1.7	1.5	1.4	1.5	1.7	1.7	1.8	1.8	1.6
13	**2010**	1.6	1.3	1.1	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.8	0.8	1.1	0.8
14	**2011**	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.0	2.1	2.2	2.2	1.3	2.0
15	**2012**	2.3	2.2	2.3	2.3	2.3	2.2	2.1	1.9	2.0	2.0	1.9	1.9	2.2	2.0
16	**2013**	1.9	2.0	1.9	1.7	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.7
17	**2014**	1.6	1.6	1.7	1.8	2.0	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.8	1.7
18	**2015**	1.6	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.1	1.7	1.9
19	**2016**	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.2	2.2	2.2
20	**2017**	2.3	2.2	2.0	1.9	1.7									

21 Source: U.S. Dept. of Labor — 12 Month Average for period ended May 2016: 2.0 **[.2] [.3]**
22 https://data.bls.gov/pdq/SurveyOutputServlet

Workpaper OM 2H
Page [.1]

Northern Indiana Public Service Company
Pro forma Adjustment to Operations and Maintenance Expense
Twelve Months Ending December 31, 2018

This pro forma increases the twelve months ended December 31, 2016 O&M expenses for a new MAOP distribution program approved by the Executive Governance Committee subsequent to the approval of the budget for the twelve months ending December 31, 2017 and December 31, 2018.

Line No.	Description	Attachment 3-C Reference	Adjustment	Amount	Page Reference
	A	B	C	D	E
1	**Actual Expense - December 31, 2016**			$ -	
2	Executive Governance Committee approved expenses for the twelve months ending December 31, 2017			250,000	[.2]
3	Adjustment to increase expenses for the twelve months ending December 31, 2018			250,000	
4	**Expenses for the twelve months ending December 31, 2018**	OM 2 Matrix	OM 2H-18R	**$ 500,000**	[.2]

Workpaper OM 2H
Page [.2]

Northern Indiana Public Service Company
MAOP Distribution
Twelve Months Ending December 31, 2018

Line No.	Description	Amount
	A	B
1	12/31/2017 Budget	-
2	**Increase/Decrease for Budget**	-
3	12/31/2018 Budget	-
4	Increase over 12/31/2018 Budget	500,000
5	12/31/2018 Executive Governance Committee Approved Spend	500,000 B [.1]

2017 Distribution MAOP Research and System Review							
C	D	E	F	G	H	I	J
Staffing	**Vendor Staff**	**Hourly Rate***		**Wkly Rate**	**Sub-total**	**Weeks**	**TOTALS**
Project Manager	1	$154	[.3]	$6,160	$6,160	8	$49,280
Engineer/Engineer Tech	2	$101	[.3]	$4,040	$8,080	25	$202,000
Total							**$251,280**
						Regulatory Budget	**$250,000** [.1]
						Variance	**-$1,280**

2018 Distribution MAOP Research and System Review							
K	L	M	N	O	P	Q	R
Staffing	**Vendor Staff**	**Hourly Rate***		**Wkly Rate**	**Sub-total**	**Weeks**	**TOTALS**
MAOP Team Lead	1	$154	[.3]	$6,160	$6,160	16	$98,560
MAOP Data Mining	2	$101	[.3]	$4,040	$8,080	50	$404,000
Total							$502,560
						Regulatory Budget	**$500,000** B
						Variance	**-$2,560**

* Hourly rate based off of vendor quote for engineering services at [.3]

Assumptions:

-For 2017 there was roughly half of the year left to perform work, so 25 work weeks were used. It then follows that 2018 would have 50 work weeks.

-Based on previous experience with a similar project using all internal resources, a Project Manager would be involved roughly 1/3rd of the time the work was being performed by the Engineer/Engineer Tech.

-Based on a previous experience with a similar project using all internal resources, approximately 12 employees working as the equivalent of the Engineer/Engineer Tech for 1 day a week, for approximately 40 weeks. This equates to roughly 3840 man-hours of labor performed. NIPSCO would expect a similar type of effort for 2018.

Previous Project	
12	Engineer/Engineer Tech
1	day a week
40	weeks worked
3840	man-hours worked

2018 MAOP Project	
2	Engineer/Engineer Tech
5	days a week
50	weeks worked
4000	man-hours worked

Northern Indiana Public Service Company
MAOP Distribution
Twelve Months Ending December 31, 2018

Workpaper OM 2H
Confidential Page [.3]

Workpaper OM 2I
Page [.1]

Northern Indiana Public Service Company
Pro forma Adjustment to Operations and Maintenance Expense
Twelve Months Ending December 31, 2018

This pro forma increases the twelve months ended December 31, 2016 O&M expenses for a new MAOP transmission program approved by the Executive Governance Committee subsequent to the approval of the budget for the twelve months ending December 31, 2017 and December 31, 2018.

Line No.	Description	Attachment 3-C Reference	Adjustment	Amount	Page Reference
	A	B	C	D	E
1	**Actual Expense - December 31, 2016**			$ -	
2	Executive Governance Committee approved expenses for the twelve months ending December 31, 2017			500,000	[.2]
3	Adjustment to increase expenses for the twelve months ending December 31, 2018			750,000	
4	**Expenses for the twelve months ending December 31, 2018**	OM 2 Matrix	OM 2I-18R	**$ 1,250,000**	[.2]

Northern Indiana Public Service Company
MAOP Transmission
Twelve Months Ending December 31, 2018

Workpaper OM 2I
Page [.2]

Line No.	Description	Amount	
	A	B	
1	12/31/17 Budget	$ -	
2	**Increase/Decrease for Budget**	-	
3	12/31/2018 Budget	$ -	
4	Increase over 12/31/2018 Budget	1,250,000	
5	12/31/2018 Executive Governance Committee Approved Spend	$ 1,250,000	A, [.1]

6	**MAOP Categories**	**2017**	**Ref**	**2018**	**Ref**
7	Pipeline	$500,000	B	$568,667	D
8	POD	$60,000	C	$681,333	E
9	**Total MAOP**	$560,000		$1,250,000	A
10	Per Executive Governance Council	500,000	[.1]	1,250,000	
11	Variance	$60,000		$0	
12	**Pipelines**	**2017**	**Ref**	**2018**	**Ref**
13	Research and Data Gathering	$500,000	[.3]	$172,985	[.3]
14	Annual Maintenance				
15	Annual Sync of MaxOP and GIS			$50,000	[.4]
16	MaxOp Support			$100,000	[.4]
17	Engineering Critical Analysis [ECA] to address deficiencies			$245,682	[.5]
18	**Total Anticipated Pipeline Costs**	$500,000	B	$568,667	D
19	Total Budgeted				
20	**Regulator Stations (POD)**	**2017**	**Ref**	**2018**	**Ref**
21	Research and Data Gathering			$186,000	[.6]
22	Field Review / Material Val	$60,000	[.7]	$335,745	[.7]
23	**Total Regulator Stations**	$60,000	C	$681,333	E

Northern Indiana Public Service Company
OM: MAOP Transmission
Pipeline Vendor Quote

Workpaper OM 2I
Page [.3]

Pipelines - Research and Data Gathering and Vendor Load into MaxOp Tool for MAOP Analysis

Line No.	Description	2017 May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Eight Months Ending December 31, 2017	2018 Jan-18	Feb-18	Mar-18	Apr-18	May-18	Five Months Ending May 31, 2018
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
3	Hours	1233.43	1246.00	941.18	941.18	941.18	235.29	235.29	235.29	6008.84	235.29	235.29	521.50	521.50	521.50	2035.08
4	Rate - Project Engineer 1	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00
5	Totals	$ 104,841	$ 105,910	$ 80,000	$ 80,000	$ 80,000	$ 20,000	$ 20,000	$ 20,000	$ 510,751	$ 20,000	$ 20,000	$ 44,328	$ 44,328	$ 44,328	$ 172,982
6	Total Budget									500,000.0 [.2]						172,985 [.2]
7	Variance									$ (10,751)						$ 3

Northern Indiana Public Service Company
OM: MAOP Transmission
Pipeline Expenses
Annual MaxOp Maintenance

Workpaper OM 2I
Page [.4]

Line No.	Description	Hours	Rate		2018 Budget	
	A	B	C		D	
1	Annual MaxOp Maintenance	240	$ 210	[.4A]	$ 50,400	
2	Total Budget				50,000	[.2]
3	Variance				$ 400	

MAOP Work and Maintenance

Line No.	Description	Vendor Fees Jan-Jun 2017	Vendor Fees Jun-Dec 2017 Est	All LDC States Annual Total	
	A	B	C	D	
1	License Fee	$ -	$ 13,000		
2	LDC 1	-	500		
3	LDC 2	-	500		
4	LDC 3	-	150		
5	LDC 4	6,000	2,500		
6	LDC 5	12,000	5,000		
7	LDC 6	25,000	25,000		
8	All LDC States except NIPSCO	10,500	10,000		
9	**Subtotal All LDC States except NIPSCO**	**$ 53,500**	**$ 56,650**	**$ 110,150**	
10	All LDC States Miles except NIPSCO			324.50	[.4B]
11	Cost Per Mile			$ 339.45	
12	NIPSCO Miles			665.71	[.4B]
13	NIPSCO Annual Cost			$ 225,974	
14	Inflation Adjustment			2.0%	[.10]
15	Total NIPSCO Projected Costs			$ 230,550	
16	Total Budget			$ 100,000	[.2]
17	Variance			$ 130,550	

Northern Indiana Public Service Company
OM: MAOP Transmission
Pipeline Expenses
Annual MaxOp Maintenance

Workpaper OM 2I
Confidential Page [.4A]

Line No.	Description	Rate	
	A	B	
1	2016 Hourly Rate	$ 200	A
2	Inflation Adjustment	2%	[.10]
3	2017 Projected Hourly Rate	$ 205	
4	Inflation Adjustment	2%	[.10]
5	2018 Projected Hourly Rate	$ 210	[.4]

Northern Indiana Public Service Company
OM: MAOP Expense
Miles of Transmission Line

Workpaper OM 2I
Page [.4B]

Line No.	Company	Total Miles
	A	B
1	NIPSCO	665.71 A [.4]
2	LDC 4	131.70
3	LDC 6	67.40
4	LDC 5	61.40
5	LDC 1	57.20
6	LDC 2	4.90
7	LDC 3	1.90
8	All LDC - except NIPSCO	324.50 [.4]

9	Line Section	Length (Mi)	Line Section	Length (Mi)	Line Section	Length (Mi)	Line Section	Length (Mi)	Line Section	Length (Mi)
	C	D	E	F	G	H	I	J	K	L
10	10-108	0.010015152	16-125	6.109693182	20-118	0.049418561	30-103	0.485191288	6-176	0.850617424
11	10-109	0.009564394	16-126	4.188268939	20-119	6.069497349	30-104	2.474077652	6-182	2.170380682
12	10-136	3.385632576	16-127	7.908225379	20-120	10.80763277	30-105	0.145899053	6-183	3.811929167
13	10-NT100	0.535227273	16-128	5.4108125	20-121	5.099810606	30-106	5.786289773	6-199	0.023484848
14	10-NT101	1.272159091	16-129	6.748897727	20-122	1.553833333	30-107	4.0185	6-201	0.024511364
15	10-NT102	0.012878788	16-130	7.607221591	20-123	4.401375	30-108	11.16289015	6-202	0.030113636
16	10-NT103	0.20094697	16-131	5.27410322	20-124	7.723878788	30-109	8.611376894	6-MS100	1.067234848
17	10-NT104	0.172916667	16-137	4.95285947	20-125	2.398486743	30-110	6.764460228	6-MS101	0.153409091
18	10-NT105	0.81344697	16-138	4.227982955	20-126	6.276030303	30-111	7.292054925	6-NT100	0.012310606
19	10-NT106	0.21875	16-139	2.847560606	20-129	4.574708333	30-112	6.503467803	6-NT101	0.017992424
20	10-NT107	1.040151515	16-140	6.055681818	20-130	0.151581439	30-113	7.438189394	6-NT102	0.435037879
21	10-RC103	0.066907197	16-141	0.255969697	20-131	4.680668561	30-114	9.811306629	6-NT103	0.374431818
22	10-ST100	1.292045455	16-142	0.041107955	20-132	0.142424242	30-115	0.621445076	6-NT104	0.008522727
23	10-ST101	1.520265152	16-143	1.633522727	20-136	1.545424242	30-116	10.67355492	6-NT105	0.011363636
24	12-100	2.702831439	16-144	4.351596591	20-137	4.872600379	30-117	11.63493864	6-NT106	0.011363636
25	12-101	1.759935606	16-145	0.071795455	20-138	0.4390625	30-118	0.093943182	6-NT107	0.120643939
26	12-102	0.169020833	16-147	1.285981061	20-NT100	0.335416667	30-119	10.41173485	6-NT108	0.468560606
27	12-124	3.362988637	16-148	3.661395833	20-RC109	0.024901515	30-120	6.334787879	6-NT109	0.014204545
28	12-125	8.179710227	16-149	1.622234848	22-100	6.826638576	30-121	1.978971591	6-NT110	1.085795455
29	12-128	6.390534091	16-150	0.257363636	22-101	0.617443039	30-122	5.57142235	6-NT111	0.00530303
30	12-133	2.14905303	16-151	1.511679924	22-102	3.600136364	30-123	9.955216497	6-NT112	0.017045455
31	12-139	0.005905303	16-152	0.043941288	22-103	9.433035985	30-124	4.202576286	6-NT113	0.120454545
32	12-162	1.065145833	16-153	0.033768939	22-104	6.8490625	30-125	4.980600379	6-NT114	0.002272727
33	12-163	1.307418561	16-154	0.042460227	22-105	2.542357955	30-126	3.298098674	6-NT115	0.003219697
34	12-164	0.024594697	16-155	0.177170455	22-106	10.74598636	30-127	11.18089583	6-NT116	0.500568182
35	12-167	0.001325758	16-157	5.076704547	22-108	5.558793561	30-128	8.626105303	6-NT117	0.010416667
36	12-168	0.007954545	16-158	5.307291667	22-109	3.492123107	30-129	7.049064015	6-NT118	0.042045455
37	12-MS100	0.796022727	16-159	6.52961553	22-110	1.212719697	30-130	8.742872159	6-NT119	0.002462121
38	12-MS101	0.483712121	16-163	1.161208333	22-111	1.055044886	30-131	7.128621212	6-NT120	0.960795455
39	12-MS102	0.771022727	16-168	3.49999053	22-112	4.161660985	30-RC107	0.084271023	6-NT121	0.009848485
40	12-MS103	1.191666667	16-169	1.035882008	22-114	2.377666667	36-100	0.900293561	6-NT122	0.015909091
41	12-NT100	0.21969697	16-GC101	0.675171212	22-115	0.642856061	36-101	2.495914773	6-NT123	0.027462121
42	12-RC104	0.014189015	16-GC102	0.903219697	24-100	4.604001894	36-102	1.732136364	6-NT124	0.039204545
43	16-100	2.189409091	16-GC103	0.98125	24-101	7.788039773	36-103	4.087439394	6-NT125	0.030681818
44	16-101	4.096030303	16-GC104	0.523863636	24-102	5.973636364	36-104	3.926981061	6-NT126	0.595643939
45	16-102	4.544919508	16-NT100	0.029545455	24-103	6.846776515	4-136	4.280623722	6-NT127	0.065151515
46	16-103	5.929972917	16-NT101	0.244507576	24-104	5.119465909	4-157	0.224092803	6-NT128	0.238257576
47	16-104	6.623354167	16-RC104	0.068399621	24-105	5.076520833	4-206	0.100604167	6-NT129	0.496590909
48	16-105	0.129747159	16-RC105	0.148338826	24-106	0.035160985	4-BD20	0.027524621	6-NT130	0.415151515
49	16-106	4.643602273	16-RC108	0.021475379	24-107	4.418549243	4-BD24	0.025392045	6-NT131	0.768371212
50	16-107	4.9839375	16-RC114	0.099933712	24-108	4.674820076	4-MS100	0.755681818	6-ST101	0.498106061
51	16-111	4.092147727	16-RC117	0.019507576	24-109	2.743289773	4-MS101	0.314393939	6-ST102	0.919318182
52	16-112	6.913869318	16-RC118	0.019333333	24-110	0.298329545	4-MS102	0.648863636	8-160	0.041901515
53	16-114	4.464912879	20-107	3.078918562	24-111	0.081242424	4-MS103	0.411363636	8-164	0.130871212
54	16-115	4.628596591	20-108	6.76392803	24-112	2.781818182	4-MS104	0.478030303	8-165	2.101706439
55	16-116	3.001204545	20-109	3.956460227	24-114	1.43421875	4-MS105	0.252651515	8-172	3.712306818
56	16-117	0.134136742	20-110	5.539772727	24-NT100	0.98219697	4-MS106	0.244886364	8-184	0.028030303
57	16-118	0.100645833	20-111	5.579005682	24-RC100	0.082007576	4-MS107	0.026325758	8-186	1.935037879
58	16-119	2.070005114	20-112	6.66754735	24-RC102	0.079934848	4-MS108	0.218371212	8-BD30	0.026670455
59	16-120	4.072183712	20-113	3.799392045	24-RC103	0.275737689	4-MS109	0.228030303	8-MS100	0.515151515
60	16-121	0.229814962	20-114	4.712931818	24-RC106	0.0771125	4-MS111	0.255492424	Total Miles	665.7141923 A
61	16-122	2.299725379	20-115	0.028689394	24-RC110	0.204272159	4-MS114	0.114962121		
62	16-123	5.575126894	20-116	1.009887689	24-RC111	0.086621212	4-NT100	0.608901515		
63	16-124	3.660246212	20-117	1.093916667	30-100	0.529981061	6-156	0.434325758		

Northern Indiana Public Service Company
OM: MAOP Transmission
Pipeline Expenses
ECA Critical Analysis

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Line No.	Description	Systems		Vendor Quote		2018 Budget [1]	
1	Develop Plans to Address Deficiencies (Engineering Critical Analysis [ECA])	55	[.5A]	$ 1,140,000	[.5B]	$ 245,682	[.2]

Footnote 1: This is a multi-year project with a cycle time of over 4 years assuming an annual spend of $245k.

Northern Indiana Public Service Company
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Pipeline Expenses
ECA Critical Analysis System Identification

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	Line No.	System Name	Length (mi)
	1	Williams Station	0.085198864
	2	RC	31.306868182
	3	New Haven Ave to Stellhorn Rd	4.631787879
	4	To Rochester 12-125	8.179710227
	5	Cleveland Valve Sta to Adamsville Rd	7.798556818
	6	Fort Wayne GM Plant	2.279924242
	7	Cleveland Valve Sta to Toll Rd 12-162	1.065145833
	8	SDI Feed Columbia City	0.024594697
	9	Blackbery Rd Reg Station	0.029356061
	10	Tassinong Station to Denham TGC 16	20.630183712
	11	Denham TGC to RC Storage 16	22.724583144
	12	Laketon To Warsaw	18.204954546
	13	RC Storage to Clymers 16	12.881324811
	14	Mayflower to Grandview	4.952859470
	15	Williams Sta To Barkley & Brunson 16	2.847560606
	16	Thompson Rd to New Haven Ave	6.097583333
	17	Concord Mall (Partial)	0.255969697
	18	Grant St Sta to SR 55 and SR 330	5.985119318
	19	To Bailly Gen off 22	1.499378788
	20	TO MC Gen off 22	5.280867424
	21	93rd Ave to Crown Pt VA	1.511679924
	22	Gary 15th Place to Tassinong 16	23.561911365
	23	ANR to Williams Station	10.383996213
	24	Elder Rd to Cleveland Rd Valve Sta	7.532952083
	25	To SDI Columbia City off 20"	8.372590909
	26	Laketon to Fort Wayne	41.643380685
	27	State Line to Inland Stl - WCE	13.679151894
	28	South Bend to Warsaw	32.386035228
	29	Barkley and Brunson to Hessen Cassel	6.653643940
	30	Clanracarde to RMS Gen - Wheatfield	9.988337121
	31	ANR to Highland Juntion	4.726289773
	32	SR 1 Station to Bluffton Rd Station	5.992255682
	33	Laporte ANR to 30	0.439062500
	34	RCUGSF to Laketon 24	35.408441288
	35	South Bend Bypass 24	9.093369319
	36	RCUGSF Comp Discharge Header, to 24-100	0.379571970
	37	Williams Sta to Barkley and Brunson	2.781818182
	38	State Line To Tassinong First	26.455683713
	39	Tassinong to Laporte US 35 30	26.200625001
	40	Tassinong to Denham TGC 30	21.118081250
	41	Denham TGC to RC Storage 30	22.157838258
	42	Laporte US 35 to S.B. Mayflower Rd 30	23.028519699
	43	State Line To Tassinong Second	26.796027652
	44	Clymers to US 35 30	8.742872159
	45	CP Vector to 45th Ave	7.128621212
	46	From 20" Mkr 112 to Wakarusa	4.280681818
	47	RR Donnely Warsaw	0.224092803
	48	Off 30 to SR 55 and 2 Reg Station	0.434325758
	49	Riley Rd to BP-Amoco	0.850617424
	50	Wakarusa E Feed	5.982309849
	51	Pleasant Ridge Station	0.023484848
	52	6 To Louis Dreyfus Off 16-126 Claypool	0.030113636
	53	DH Mitchell Gen Sta	0.325340909
	54	GM Fogus Pkwy 8	2.101706439
[.5]	55	Bluffton Panhandle 300S to 100E Dist	1.935037879
	56	**Total Length**	**549.111996040**
	57	**Ave System Length**	**9.983854473**

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OM: MAOP Transmission
Pipeline Expenses
ECA Critical Analysis System Vendor Quote

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Northern Indiana Public Service Company
OM: MAOP Transmission
Pipeline Expenses (Cont.)
ECA Critical Analysis System Vendor Quote

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Northern Indiana Public Service Company
OM: MAOP Transmission
POD Phase I - Vendor Quote
Twelve Months Ending December 31, 2018

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Line No.	Scope of Work	Vendor Tasks	Estimate Break-downs: Estimated Hours	Basis	Amount	Assigned Personnel	Rate	Estimated Cost	
	A	B	C	D	E	F	G	H	
1	177 stations	Data Mining (based on 300 WOs)	5.0 hrs	per WO	300 WOs	Project Engineer I	$ 65	$ 97,500	
2	Up to 30,000 images / 300 WOs	Input and Review MAOP issue via MaxOp	4.0 hrs	per station	177 stations	Project Engineer III	$ 125	$ 88,500	
3	TOTAL							**$ 186,000**	[.2]

Northern Indiana Public Service Company
OM: MAOP Transmission
POD Field Station
Twelve Months Ending December 31, 2018

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Line No.	Descriptions	Small		Medium		Large		Total	
	A	B		C		D		E	
1	**Cost Per Station**	$ -	[.8]	$ 11,267	[.8]	$ 18,362	[.8]		
2	**Stations**	72	[.9]	74	[.9]	31	[.9]	177	
3	**Subtotal**	$ -		$833,758		$569,222		$1,402,980	
4	**Less: 2017 Pilot**							$60,000	[.2]
5	**Total Remaining Costs**							$1,342,980	
6	**Four Year Cycle**							4	
7	**Annual Cost**							$335,745	[.2]

Northern Indiana Public Service Company
OM: MAOP Transmission
Field Station Asset Register and Classification
Twelve Months Ending December 31, 2018

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Northern Indiana Public Service Company **Workpaper OM 2I**
OM: MAOP Transmission **Page [.9]**
Field Station Asset Register and Classification
Twelve Months Ending December 31, 2018

Line No.		Station Type	Number of Stations
		A	B
1		Small Stations	72 [.7]
2		Medium Stations	74 [.7]
3		Large Stations	31 [.7]
			177

Line No.	Station #	Description	Maximo Name	Size
	C	D	E	F
1	50056-1	50056-1-VECTOR-CROWN POINT	#N/A	L
2	50057-1	50057-1-1/4 MILE NORTH OF JOHNSON RD,EAST SIDE, NO	VECTOR LAPORTE	L
3	50139-1	50139-1-22-30 CROSS TIE LAPORTE	22-30 CROSS TIE LAPORT	L
4	51356-1	<Null>	ANR CHESTERTON	L
5	51356-2	<Null>	ANR CHESTERTON	L
6	53867-1	53867-1-CR 200E SOUTH OF CR 200S	#N/A	L
7	55319-1	Crossroads Auburn 2nd station	#N/A	L
8	55685-1	Crossroads Auburn	#N/A	L
9	55689-1	55689-1-WINDY OAKS RNG TAKE STATION	#N/A	L
10	55810-1	55810-1 2500 W W1600S & S880W	#N/A	L
11	55848-1	55848-1 PEPL TAKE STATION	#N/A	L
12	7093-1	7093-1-JACKSON ROAD METER	Jackson Road Meter	L
13	7093-2	7093-2-JACKSON ROAD AND MAIN STREET	Jackson Road Meter	L
14	7136-1	7136-1-HIGHLAND JUNCTION	HIGHLAND JUNCTION	L
15	7136-2	7136-2-HIGHLAND JUNCTION	HIGHLAND JUNCTION	L
16	7136-3	7136-3-HIGHLAND JUNCTION	#N/A	L
17	7136-4	7136-4-HIGHLAND JUNCTION	#N/A	L
18	7136-5	7136-5-HIGHLAND JUNCTION	HIGHLAND JUNCTION	L
19	7136-7	7136-7-HIGHLAND JUNCTION	HIGHLAND JUNCTION	L
20	7170-1	7170-1-DUNLAP TRUNKLINE	Dunlap Trunkline	L
21	7179-1	7179-1-LOCATED NORTH WEST OF WINAMAC ON CR600N EAS	DENHAM TRUNKLINE	L
22	7186-1	7186-1-LILAC AND E 3RD ROAD	BREMEN TRUNKLINE	L
23	7622-1	7622-1-TAKE RT 49 NO. OF RT 8 FOR 1.9 MI - WEST .4	TASSINONG (MARKER 51)	L
24	7646-1	7646-1-JUNCTION OF CR 150 WEST AND CR 950 S (ADAMS	#N/A	L
25	7825-1	7825-1-NORTH HAYDEN NGPL	#N/A	L
26	7825-2	7825-2-NORTH HAYDEN NORTHERN BORDERS	#N/A	L
27	8000-1	8000-1-CR200 W & CR 1100 N. (ADDRESS 10992 N/200	#N/A	L
28	8000-2	8000-2-CR200 W & CR 1100 N. (ADAMS COURT) (ADDRESS	PANHANDLE - WILLIAMS D	L
29	8150-1	8150-1-.3 MILES SOUTH OF I-94 ON HWY 421, THEN .4	ANR MICHIGAN CITY	L
30	8209-1	8209-1-ANR/FORT WAYNE	#N/A	L
31	8606-1	8606-1-VISTULA TRUNKLINE	#N/A	L
32	49550	<Null>	#N/A	M
33	55891	<Null>	#N/A	M
34	1583-1	1583-1-BETHLEHEM STEEL NO. 1	BETHLEHEM STEEL NO. 1	M
35	1832-1	1832-1-BETHLEHEM #2	BETHLEHEM #2	M
36	46586-1	46586-1-CR 6-AIRPORT REG STATION	CR 6-AIRPORT REG STATI	M
37	48311-1	48311-1-15TH PLACE REG STATION	15TH PLACE REG STATIOI	M
38	48784-1	<Null>	#N/A	M
39	49371-1	49371-1-US35 1/4 MILE NORTH OF CR500S ON EAST SIDE	US35 AND 30"	M
40	49973-1	49973-1-SW CORNER OF SR.14 AND CR.700E 1 MILE WEST	ST RD 14 & CR 700E	M
41	50105-1	50105-1-CROSSROADS GRIFFITH	#N/A	M
42	50655-1	50655-1-WEST SIDE OF CR 1000E 1/2 MILE NORTH OF CR	CR1000E N/O CR150N	M
43	55347-1	ANR Ashley	#N/A	M
44	55357-1	55357-1-CR 585 N & STATE ROAD 120	#N/A	M
45	55437-1	Panhandle Edgerton	#N/A	M
46	55591-1	55591-1-CR 400 E & CR 500 N	#N/A	M
47	55633-1	55633-1-OLD ST RD 27 AND CR 00	#N/A	M
48	55634-1	55634-1-STATE HWY 1 & CR 775 S	#N/A	M
49	55636-1	55636-1-SR 327 & CR 500 S	#N/A	M
50	55668-1	Crossroads Butler	#N/A	M
51	55668-2	Crossroads Butler 2nd station	#N/A	M
52	55678-1	Panhandle Monroeville	#N/A	M
53	55750-1	55750-1 BLUFFTON RD & SANDPOINT RD	#N/A	M
54	55816-1	55816-1 34TH AVE + COLORADO ST	#N/A	M
55	7068-1	7068-1-WINAMAC	WINAMAC	M
56	7089-1	7089-1-C.R. 50 W, .9 MILE NORTH OF SEVERS ROAD (C.	LAPORTE 22" LINE TAKE C	M

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Field Station Asset Register and Classification
Twelve Months Ending December 31, 2018

Line No.	Station #	Description	Maximo Name	Size
	C	D	E	F
57	7091-1	7091-1-IRONWOOD & JACKSON	IRONWOOD & JACKSON	M
58	7096-1	7096-1-FISHER ST	FISHER ST	M
59	7096-2	7096-2-FISHER ST II (275#)	FISHER ST II (275#)	M
60	7097-1	7097-1-MIAMI & JACKSON	MIAMI & JACKSON	M
61	7099-1	7099-1-GRANT ST	GRANT ST	M
62	7107-1	7107-1-AETNA - 15TH AVE	AETNA - 15TH AVE	M
63	7107-2	7107-2-AETNA - 15TH AVE	AETNA - 15TH AVE	M
64	7112-2	<Null>	Decatur Panhandle (Ossian	M
65	7137-1	7137-1-20" - 30"	20" - 30"	M
66	7139-1	7139-1-ON CR450N, 1/2M EAST OF CR575W	MKR 86 TRANS STATION	M
67	7146-1	7146-1 SR 9 & CR 100 S	ANR LaGrange	M
68	7151-1	7151-1-CRUMSTOWN	CRUMSTOWN	M
69	7162-1	7162-1-SCOTT TOWNSHIP	SCOTT TOWNSHIP	M
70	7202-1	7202-1-FENCED (90'X125'GMT)(75'X100 DIST.) .3 MI.	HANNA STREET	M
71	7202-2	<Null>	#N/A	M
72	7719-1	7719-1-US 35, 4 MILES NORTH OF LAPORTE	US 35 & 22"	M
73	7730-1	7730-1-BLACKBERRY ROAD & DRAGOON TR.	BLACKBERRY ROAD & DR	M
74	7740-1	7740-1 CR 300 E & CR 200 S	ANR Wolcottville	M
75	7768-1	7768-1-COUNTY RD 850 WEST, 1/4 MILE NORTH OF ST. R	SR 114	M
76	7769-1	7769-1-CR 1100 N. 1 MILE EAST OF SR#13/JUST SOUTH	HANLEY ROAD	M
77	7770-1	7770-1-NORTH OF SR #114 ON SR #9, ONE MILE ON WEST	ST RD 9	M
78	7813-1	7813-1-1.5 MILES SOUTH OF SR#114 ON CR 200 WEST FI	LAKETON	M
79	7855-1	7855-1-NORTH EAST OF ROYAL CENTER AT CR525W & CR90	#N/A	M
80	7855-2	7855-1-NORTH EAST OF ROYAL CENTER AT CR525W & CR90	WABASH VALLEY FEED	M
81	7866-2	7866-2-ON DIVISION RD - .3 MILES SO OF RT 30 - .3	VALPO WANATAH 30" T.O.	M
82	7887-1	7887-1-SILVER LAKE	SILVER LAKE	M
83	7888-1	7888-1-CLAYPOOL	CLAYPOOL	M
84	7937-1	7937-1-SOUTH OF LOGANSPORT ON SR25 & CR300S	CLYMERS STATION-DELPI	M
85	7937-2	7937-2-SOUTH OF LOGANSPORT ON SR25 & CR300S	CLYMERS STAT-LOGANSF	M
86	7979-1	7979-1-MAYFLOWER ROAD 45# SYSTEM	MAYFLOWER ROAD 45# S	M
87	7979-2	7979-2-MAYFLOWER ROAD	MAYFLOWER ROAD	M
88	7980-1	7980-1-GRANDVIEW & SOUTH SHORE RR	GRANDVIEW & SOUTH SH	M
89	7980-2	7980-2-GRANDVIEW & SOUTH SHORE RR	GRANDVIEW & SOUTH SH	M
90	7988-1	7988-1-US 27 SOUTH TO JUNCTION OF THOMPSON ROAD, S	HESSEN CASSEL	M
91	8067-1	8067-1-STATE ROAD #1, .2 MILE NORTH OF PLEASANT CE	#N/A	M
92	8152-1	8152-1-0.7 MILES WEST OF I-65; 0.8 MILES SOUTH OF	APPLEY VALLEY-30# TAKE	M
93	8258-1	8258-1-US 6, 1/4 MILE EAST OF US 421	US 6 & 421	M
94	8273-1	8273-1-NEW HAVEN 12'--350# SYSTEM)	NEW HAVEN 12'--350# SYS	M
95	8273-2	8273-2-NEW HAVEN & 16" LIVE 125 SYSTE	NEW HAVEN & 16" LIVE 12	M
96	8289-1	8289-1-SR 2 & SR 55	SR 2 & SR 55	M
97	8300-1	<Null>	PLEASANT RIDGE	M
98	8300-1	8300-1-PLEASANT RIDGE	PLEASANT RIDGE	M
99	8300-2	8300-2-PLEASANT RIDGE IBEC FEED	PLEASANT RIDGE IBEC FE	M
100	8301-1	8301-1 SR 3 & CR 400 S	#N/A	M
101	8318-1	8318-1-ANR/MONROE	#N/A	M
102	8692-2	8692-2-RT 49 NORTH OF WHEATFIELD, 829 PILOT REVERS	RMSG - GENERAL PURPO	M
103	8692-3	8692-3-RT 49 NORTH OF WHEATFIELD---R.M.S.G.S.	RMSG - COAL UNITS	M
104	8952-1	8952-1-DOUGLAS ROAD	DOUGLAS ROAD	M
105	7041-2	7041-2-NAPPANEE 280#	NAPPANEE 280#	M
106	55841	ANR CROWN POINT POD	#N/A	S
107	10146-1	<Null>	#N/A	S
108	31475-1	31475-1-PULASKI CO CR 350S E/O SR 119	PULASKI CO CR 350S E/O	S
109	46562-1	46562-1-WAKARUSA II REG STA	WAKARUSA II REG STA	S
110	48010-1	48010-1-C.R 200 E,NORTH OF C.R 800N DECATUR.INSIDE	CR 200E & CR800N	S
111	48370-1	48370-1-D H MITCHELL REG STA II	D H MITCHELL REG STA II	S
112	48470-1	48470-1-G P GYPSUM CORP-WHEATFIELD	0	S
113	49716-1	49716-1-SAMUELSON ROAD	SAMUELSON ROAD	S
114	50056-2	50056-2-ERIE-CROWN POINT	ERIE-CROWN POINT	S
115	51131-1	51131-1- 45TH AND ERIE LACKAWANNA ROW	45TH AND ERIE LACKAWA	S
116	51266-1	51266-1-CLEVELAND RD & TOLL RD	CLEVELAND RD & TOLL RI	S
117	52137-1	52137-1-WEST SIDE ERNST ROAD APPROXIMATELY 1000 FT	ERNST ROAD	S
118	52714-1	52714-1-SPRING RUN	SPRING RUN	S
119	53113-1	53113-1-CR 6 & CR 10 REG STATION	CR 6 & CR 10 REG STATIO	S
120	53242-1	53242-1-CLAYPOOL-BIODIESEL FEED	#N/A	S
121	53642-1	53642-1-3RD ST MISHAWAKA REG STATION	3RD ST MISHAWAKA REG	S
122	53859-1	53859-1-SOUTH OF RR TRACKS ONTHE NORTHEND OF ENTHA	BLUFFTION TOWN 125# FE	S
123	55634-2	55634-2-STATE HWY 1 & CR 775 S	#N/A	S

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Field Station Asset Register and Classification
Twelve Months Ending December 31, 2018

Line No.	Station #	Description	Maximo Name	Size
	C	D	E	F
124	55738-1	55738-1-STATE ROAD 51 & US 20	#N/A	S
125	7021-1	7021-1-SOUTH HOBART	SOUTH HOBART	S
126	7021-2	7021-2-SOUTH HOBART	SOUTH HOBART	S
127	7041-1	7041-1-NAPPANEE 50#	NAPPANEE 50#	S
128	7049-1	7049-1-12 E PAST HWY#49TO CR#N.100E (TREMONT) GO N	TREMONT & SO SHORE R/	S
129	7085-1	7085-1-SHERIDAN RD - FEED 10" (FISHER)	SHERIDAN RD - FEED 10"	S
130	7085-2	7085-2-US 12 TO SHERIDAN AVE., APPROX 1.25 MILES F	SHERIDAN AVE	S
131	7087-1	7087-1-WEST WARSAW	WEST WARSAW	S
132	7100-1	7100-1-ST RD 17 NORTH OF CR200N, NORTH OF LOGANSPO	ST RD 17	S
133	7122-1	7122-1-GRIFFITH FEED	GRIFFITH FEED	S
134	7122-2	7122-2-GRIFFITH HESSVILLE FEED	GRIFFITH HESSVILLE FEE	S
135	7155-1	7155-1-WAKARUSA	WAKARUSA	S
136	7161-2	7161-2-ELKHART TAKEOFF & OAKLAND 270#	ELKHART TAKEOFF & OAk	S
137	7179-2	7179-2-DENHAM TOWN DISTRIBUTION	DENHAM TOWN DISTRIBU	S
138	7181-1	7181-1-1 MILES N/O INTRSECTON OF US 12 & WAVERLY R	WAVERLY RD	S
139	7688-1	7688-1-JOHNSON ROAD, 2.3 MILE WEST OF U.S. 35	JOHNSON ROAD & 22"	S
140	7691-1	7691-1-C.R. 50S, .7 MILE WEST OF C.R. 500W	PINOLA	S
141	7710-1	7710-1-.5 MILE S/O 300N & CR 950W (FOLDENAUR RD)	22 LINE & CO RD 950W	S
142	7729-1	7729-1-COUNTY LINE ROAD	COUNTY LINE ROAD	S
143	7764-1	7764-1-2.5 MILE SO OUT RT 30 ON CR 500N THEN .1 MI	LAKE ELIZA	S
144	7764-2	7764-2-2.5 MILE SO OUT RT 30 ON CR 500N THEN .1 MI	LAKE ELIZA	S
145	7866-1	7866-1-ON DIVISION RD - .3 MILES SO OF RT 30 - .3	#N/A	S
146	7903-1	7903-1-NORTH OF GILEAD ON SR#19/.5 MILES SOUTH OF	GILEAD	S
147	7910-1	7910-1-AUSTIN RD. & 30" LINE	AUSTIN RD. & 30" LINE	S
148	7922-1	7922-1-SR 2 & RANGELINE RD	SR 2 & RANGELINE RD	S
149	7945-1	7945-1-NORTH OF FULTON ON THE WEST SIDE OF SR25	FULTON	S
150	7952-1	7952-1-NORTH EAST OF ROCHESTER ON SR25 - 2ND STATI	ROCHESTER SR25 & ERIE	S
151	7961-1	7961-1-NORTH WEST OF MACY ON CR 400W, SOUTH OF CR1	MACY REGULATOR STATI	S
152	7990-1	7990-1-WEST OF SR#15 ON CR 1000 N. 2 MILES THEN NO	ROANN TAKE-OFF	S
153	7997-1	7997-1-ALLEN/WHITLEY COUNTY LINE ROAD, 1/2 MILE NO	COUNTY LINE ROAD & 20"	S
154	8005-1	8005-1-COLFAX AVE	COLFAX AVE	S
155	8015-1	8015-1-INDIANAPOLIS ROAD (OLD SR#3) .85 MILES NORT	ST RD 3 & 20" LINE	S
156	8066-2	8066-2-GOOSE LAKE (SW-WARSAW)	GOOSE LAKE (SW-WARSA	S
157	8067-2	8067-2-STATE ROAD #1, .2 MILE NORTH OF PLEASANT CE	ST RD 1 (DISTRICT FEED)	S
158	8067-3	REG #8067-3 N/O PLEASANT CENTER RD W/S BLFTON RD	#N/A	S
159	8072-1	8072-1-IN GRASS CREEK GAS PLAN FLOW CONTROLLER-PL	#N/A	S
160	8091-1	8091-1-ON WS OLD TRAIL RD. AT 156 FT. N OF PRAIRIE	OLD TRAIL & PRAIRE GRO	S
161	8151-1	<Null>	CO. RD. 500W, 1/4 MI S. S.I	S
162	8171-1	8171-1-RT 2 APPROXIMATELY 5 MILES SOUTH OF RT 30	SR 2 & 16" LINE - MARKER	S
163	8173-1	8173-1-15TH & CLAY	15TH & CLAY	S
164	8191-1	8191-1-57TH & CLEVELAND	57TH & CLEVELAND	S
165	8197-1	8197-1-CR525W & CR900N, 2 1/2 MILE N E OF ROYAL CE	30" & 24" TIE	S
166	8200-1	8200-1-1 3/4 MILE SOUTH OF SR17 ON CR800W	KEWANNA TAKE-OFF	S
167	8211-1	8211-1-JOE MARTIN RD & 30"	JOE MARTIN RD & 30"	S
168	8234-1	8234-1-MONOQUET TAKE OFF	MONOQUET TAKE OFF	S
169	8235-1	8235-1-NORTH RIVER ROAD	NORTH RIVER ROAD	S
170	8249-2	8249-2-WAKARUSA TAKE-OFF	WAKARUSA TAKE-OFF	S
171	8253-1	8253-1-SHADYSIDE & US 12 NEAR AIR PRODUCTS	SHADYSIDE & US 12	S
172	8256-1	8256-1-PORT OF INDIANA	PORT OF INDIANA	S
173	8258-2	8258-2-1/4 MILE EAST OF US 421 ON US 6, SOUTH SIDE	SOUTH WESTVILLE STATI	S
174	8286-1	8286-1-ST RD 1 & FERGUSON RD	ST RD 1 & FERGUSON RD	S
175	8290-1	8290-1-STELLHORN ROAD	STELLHORN ROAD	S
176	8293-1	8293-1-MADISON ROAD AND S.R. 331	WOODLAND & WYATT	S
177	8609-1	8609-1-SR 8 & CR 575W (I65 SOUTH TO HWY.#2 WEST TO	HEBRON 30" & 4" (VAN DA	S

CPI-All Urban Consumers (Current Series)
12-Month Percent Change

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Series Id: CUUR0000SA0L1E
Not Seasonally Adjusted
Series Title: All items less food and energy in U.S. city average, all urban consumers, not seasonally adjusted
Area: U.S. city average
Item: All items less food and energy
Base Period: 1982-84=100
Years: 2007 to 2017

Line No.	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	**2007**	2.7	2.7	2.5	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.4	2.4	2.3
2	**2008**	2.5	2.3	2.4	2.3	2.3	2.4	2.5	2.5	2.5	2.2	2.0	1.8	2.3	2.3
3	**2009**	1.7	1.8	1.8	1.9	1.8	1.7	1.5	1.4	1.5	1.7	1.7	1.8	1.8	1.6
4	**2010**	1.6	1.3	1.1	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.8	0.8	1.1	0.8
5	**2011**	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.0	2.1	2.2	2.2	1.3	2.0
6	**2012**	2.3	2.2	2.3	2.3	2.3	2.2	2.1	1.9	2.0	2.0	1.9	1.9	2.2	2.0
7	**2013**	1.9	2.0	1.9	1.7	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.7
8	**2014**	1.6	1.6	1.7	1.8	2.0	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.8	1.7
9	**2015**	1.6	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.1	1.7	1.9
10	**2016**	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.2	2.2	2.2
11	**2017**	2.3	2.2	2.0	1.9	1.7									

		Average	
12			
13	Twelve Months Ended May 2016	2.0%	**[.4] [.4A]**

14 Source: U.S. Dept. of Labor
15 https://data.bls.gov/pdq/SurveyOutputServlet

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Northern Indiana Public Service Company
Pro forma Adjustment to Operations and Maintenance Expense
Twelve Months Ending December 31, 2018

This pro forma increases twelve months ended December 31, 2016 O&M expenses for a new test station casing program for the twelve months ending December 31, 2017 and December 31, 2018.

Line No.	Description	Attachment 3-C Reference	Adjustment	Amount	Page Reference
	A	B	C	D	E
1	**Budget for twelve months ending December 31, 2018**			$ -	
2	Adjustment to increase expenses for the twelve months ending December 31, 2018	OM 2 Matrix	OM 2R-18R	350,000	
3	**Proposed expenses for twelve months ending December 31, 2018**			$ 350,000	[.2]

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Northern Indiana Public Service Company
Pro forma Adjustment to Operation and Maintenance Expense
Twelve Months Ending December 31, 2018

Line No.	Description	Amount	
	A	B	
1	12/31/2017 Budget	$ -	
2	Increase / (Decrease) from Budget	-	
3	12/31/18 Budget	$ -	
4	Increase over 12/31/2018 Budget	350,000	
5	12/31/2018 Ratemaking	$ 350,000	A [.1]

Support:

	2018							
	Description	Units[1]	Units / Day	Cost / Day or Unit		Days Needed	Total Cost	
	C	D	E	F		G	H	
6	Inspection of existing facilities	323	10.0	$1,200 / Day	[.3]	31	$ 37,200	
7	Vac Truck installation of facilities	670	4.5	$1,761 / Day	[.4]	149	262,335	
8	Material requirement (Test Station, wire, coating, etc.)	670	-	$85 / Unit	[.5]	-	57,084	
9	Maximo and Locate data entry	670	32.0	$235 / Day	[.6]	20	4,699	
10	Total Cost in 2017 Dollars						$ 361,319	
11	Inflation Adjustment						2.0%	[.7]
12	**Total Cost in 2018 Dollars**						**$ 368,545**	
13						Per Request	350,000	A
14						Variance	$ (18,545)	

Footnote 1: This is a multi-year program. NIPSCO GIS asset register includes more than 1,500 items.

Northern Indiana Public Service Company
OM: Gas Operations - Test Station Casings Inspection Cost Support

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Confidential Page [.3]

Northern Indiana Public Service Company
OM: Gas Operations - Test Station Casings
Vac Truck Support

Workpaper OM 2R
Confidential Page [.4]

Northern Indiana Public Service Company
OM: Gas Operations - Test Station Casings
Materials Support

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Line No.	Item #	Material Description	Purchase Price [1]	# in Cost	Cost Per Unit	Quantity	Total	
	A	B	C	D	E	F	G	
1	307651	Station, Mechanical, Big Fink Head & Post	$ 28.75	1	$ 28.75	1	$ 28.75	
2	571345	Cartridge, Shot, Weld, Power Charge	$ 1.67	1	$ 1.67	1	$ 1.67	
3	220151	Coating, Protective Patch	$ 106.14	12	$ 8.84	1	$ 8.84	
4	578210	Connector, Cable Sleeve	$ 0.23	1	$ 0.23	1	$ 0.23	
5	346361	Wire, Electrical, TW #10, Copper	$ 0.20	1	$ 0.20	1	$ 0.20	
6	307648	Station, Mechanical, Telescoping, 5 Terminal	$ 45.51	1	$ 45.51	1	$ 45.51	
7		Total Cost					$ 85.20	**[.2]**

Footnote 1: Purchased Price based on MAPPS System

Northern Indiana Public Service Company
OM: Gas Operations - Test Station Casings
Temporary Employee Rate

Workpaper OM 2R
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Invoice Num	Week Ending	Temp Name (Last, First)	Hours	Bill Rate	Labor Type	Total Billing	Company Number	Report to (NI Supv ID	Code Block	Trx Number
68472684	5-Mar-17	[redacted]	6.00	29.37	REG	176.22	059-NP-GM&T ADMINIS	[redacted]	059-NIPSCO-161058-103900	147931882
68472684	12-Mar-17		24.00	29.37	REG	704.88	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	147931848
68472684	19-Mar-17		12.00	29.37	REG	352.44	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	147933886
68472684	19-Mar-17		12.00	29.37	REG	352.44	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	147933885
68484891	26-Mar-17		12.00	29.37	REG	352.44	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148035606
68484891	26-Mar-17		4.00	29.37	REG	117.48	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148035605
68484891	26-Mar-17		8.00	29.37	REG	234.96	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148044890
68493194	2-Apr-17		5.00	29.37	REG	146.85	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148236002
68493194	2-Apr-17		19.00	29.37	REG	558.03	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148236513
68501786	9-Apr-17		19.00	29.37	REG	558.03	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148337953
68501786	9-Apr-17		5.00	29.37	REG	146.85	059-NP-GM&T ADMINIS		059-NIPSCO-161058-103900	148339604
68512646	16-Apr-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148530525
68512646	16-Apr-17		9.00	29.37	REG	264.33	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148531199
68512646	16-Apr-17		4.00	29.37	REG	117.48	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148533395
68512646	16-Apr-17		3.00	29.37	REG	88.11	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148539914
68512646	16-Apr-17		7.00	29.37	REG	205.59	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148541250
68522112	23-Apr-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148702323
68522112	23-Apr-17		11.25	29.37	REG	330.41	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148703357
68522112	23-Apr-17		9.50	29.37	REG	279.02	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148703387
68522112	23-Apr-17		0.25	29.37	REG	7.34	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148704670
68522112	23-Apr-17		1.50	29.37	REG	44.06	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148708505
68522112	23-Apr-17		0.50	29.37	REG	14.69	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148709726
68530755	30-Apr-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148769201
68530755	30-Apr-17		2.50	29.37	REG	73.43	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148769865
68530755	30-Apr-17		0.50	29.37	REG	14.69	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148769868
68530755	30-Apr-17		3.50	29.37	REG	102.80	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148779284
68530755	30-Apr-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148779285
68530755	30-Apr-17		2.00	29.37	REG	58.74	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148781762
68530755	30-Apr-17		13.50	29.37	REG	396.50	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148782233
68539604	7-May-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148973342
68539604	7-May-17		2.00	29.37	REG	58.74	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148973842
68539604	7-May-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148986359
68539604	7-May-17		15.00	29.37	REG	440.55	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148986360
68539604	7-May-17		0.50	29.37	REG	14.69	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148986530
68539604	7-May-17		4.00	29.37	REG	117.48	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148986796
68539604	7-May-17		0.50	29.37	REG	14.69	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	148986797
68550872	14-May-17		6.00	29.37	REG	176.22	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149175021
68550872	14-May-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149175585
68550872	14-May-17		8.00	29.37	REG	234.96	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149175586
68550872	14-May-17		4.00	29.37	REG	117.48	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149179595
68550872	14-May-17		5.00	29.37	REG	146.85	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149180272
68560617	21-May-17		7.00	29.37	REG	205.59	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149294760
68560617	21-May-17		1.00	29.37	REG	29.37	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149297547
68560617	21-May-17		10.00	29.37	REG	293.70	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149304475
68560617	21-May-17		3.00	29.37	REG	88.11	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149306291
68560617	21-May-17		3.00	29.37	REG	88.11	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149308462
68569597	28-May-17		1.50	29.37	REG	44.06	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149392540
68569597	28-May-17		2.00	29.37	REG	58.74	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149395860
68569597	28-May-17		10.50	29.37	REG	308.39	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149396173
68569597	28-May-17		10.00	29.37	REG	293.70	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149402023
68578273	4-Jun-17		10.50	29.37	REG	308.39	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149562606
68578273	4-Jun-17		8.50	29.37	REG	249.65	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149564289
68578273	4-Jun-17		5.00	29.37	REG	146.85	059-NP-GM&T ADMINIS		059-NIPSCO-165456-102900	149564714

Temp. Employee $29.37 x 8hrs = $234.96

CPI-All Urban Consumers (Current Series)
12-Month Percent Change

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Series Id: CUUR0000SA0L1E
Not Seasonally Adjusted
Series Title: All items less food and energy in U.S. city average, all urban consumers, not seasonally adjusted
Area: U.S. city average
Item: All items less food and energy
Base Period: 1982-84=100
Years: 2007 to 2017

Line No.	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	**2007**	2.7	2.7	2.5	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.4	2.4	2.3
2	**2008**	2.5	2.3	2.4	2.3	2.3	2.4	2.5	2.5	2.5	2.2	2.0	1.8	2.3	2.3
3	**2009**	1.7	1.8	1.8	1.9	1.8	1.7	1.5	1.4	1.5	1.7	1.7	1.8	1.8	1.6
4	**2010**	1.6	1.3	1.1	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.8	0.8	1.1	0.8
5	**2011**	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.0	2.1	2.2	2.2	1.3	2.0
6	**2012**	2.3	2.2	2.3	2.3	2.3	2.2	2.1	1.9	2.0	2.0	1.9	1.9	2.2	2.0
7	**2013**	1.9	2.0	1.9	1.7	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.7
8	**2014**	1.6	1.6	1.7	1.8	2.0	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.8	1.7
9	**2015**	1.6	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.1	1.7	1.9
10	**2016**	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.2	2.2	2.2
11	**2017**	2.3	2.2	2.0	1.9	1.7									
12													Average		
13												Twelve Months Ended May 2016	2.0% **[.2]**		

14 Source: U.S. Dept. of Labor
15 https://data.bls.gov/pdq/SurveyOutputServlet