January 30, 2015

Ms. Beth Krogel Roads
General Counsel
Indiana Utility Regulatory Commission
101 W Washington Street, Suite 1500E
Indianapolis, Indiana 46204

Dear Ms. Roads,

Indianapolis Power & Light Company (IPL) is pleased to provide the Commission with this annual update on the implementation of the recommendations from the O'Neill Management Consulting report on the downtown network issued December 2011.

The attached report provides an update on the remaining two on-going reporting items that were continued into 2014. For these two items, a report was to be submitted to the Commission in January 2015, for year ending 2014. The filing of this 2014 report will complete all of the commitments which IPL made in response to the 2011 Downtown Network Assessment.

If you or any of the Commission Staff have any questions regarding this annual update report, please let us know.

Respectfully submitted,

Roderick

Roderick Conwell
Manager, Regulatory Operations
Indianapolis Power & Light Company

Cc via email: Mr. Robert Veneck, IURC
Mr. Brad Borum, IURC

INDIANAPOLIS POWER & LIGHT COMPANY

REPORT IN RESPONSE TO O'NEILL CONSULTING INDEPENDENT ASSESSMENT OF INDIANAPOLIS POWER & LIGHT COMPANY'S DOWNTOWN UNDERGROUND NETWORK FOR THE YEAR ENDED 2014

JANUARY 30, 2015

1.0 Introduction

In September of 2011, Indianapolis Power & Light Company (IPL) and the Indiana Utility Regulatory Commission (IURC) engaged O'Neill Management Consulting to do an independent assessment of the IPL Downtown Network System in response to an increase in network events in the first part of 2011. O'Neill Management Consulting issued their *Independent Assessment of Indianapolis Power & Light's Downtown Underground Network* in December 2011[1]. In January 2012, IPL issued its response to the O'Neill Report which offered ten recommendations to address the issues identified in their assessment[2]. IPL committed to address all ten recommendations in the O'Neill Report and made additional commitments beyond the O'Neill Report's recommendations. Included in those additional commitments were progress reports to be filed at the end of 2012, 2013, and 2014.

IPL filed the 2012 Network Assessment report on January 25, 2013. The 2012 report summarized IPL's progress on the ten recommendations from the O'Neill Report and IPL's progress on the additional commitments that the Company had made. At the end of 2012, IPL completed all recommendations included in the O'Neill Report. As previously stated, IPL made certain commitments in addition to the O'Neill recommendations. Completion of some of those commitments was scheduled to carry over into 2013.

IPL filed the 2013 Network Assessment report on January 31, 2014. The 2013 report summarized IPL's progress on eight remaining open commitments. IPL reported in the 2013 report that it completed implementation of all remaining open items. Two of the items included a reporting commitment that continued through 2014.

This 2014 Network Assessment Report by IPL addresses the two remaining reporting commitments from the January 31, 2014 report concerning IPL's status on the additional commitments.

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[1] Link to 2011 O'Neill Report
http://www.in.gov/iurc/files/IPL_Downtown_Network_Audit_Report_-_Final_Report(1).pdf

[2] Link to IPL 2012 Action Plan
http://www.in.gov/iurc/files/IPL_Action_Plan(1).pdf

The following table summarizes the open two reporting commitments as shown in the IPL 2013 Network Assessment Report.

Recommendation	Continuation item	Report Action
4 - Network protectors and transformers	Report 2013 and 2014 replacement volume	Submit report at the end of 2014
6 - Inspection technology	Report results at the end of 2013 and 2014	Submit report at the end of 2014

For reference, the complete list of recommendations from the O'Neill Report and the IPL commitments are included in Appendix A of this report.

2.0 Summary

As reported in the 2012 Network Assessment report, IPL completed all recommendations in response to the O'Neill Management Consulting Report by the end of 2012. There were commitments that IPL made in addition to the O'Neill recommendations. IPL completed all of the commitments by the end of 2012 with the exception of eight items that were scheduled to carry-over into 2013. At the end of 2013 all of the open commitments were completed. There were two on-going reporting items that continued into 2014. They were:

- Recommendation 4, report on effectiveness of standards change for the network transformers and the number of network transformers and network protectors replaced in 2014. (Covered in Section 3.1)

- Recommendation 6, report on the technology being used for manhole and vault inspections and status of the inspection program (Covered in Section 3.2)

For these two items, a final report was to be submitted to the Commission in January 2015, for year ending 2014. The filing of the 2014 report will complete all of the commitments that IPL made in response to the 2011 Downtown Network Assessment.

3.0 Status of Open Commitments from 2013

This section will highlight each of the two remaining open reporting commitments at the end of 2013 and provide their status as of December 31, 2014.

3.1 Recommendation #4 – Network Protectors & Network Transformers

This open item related to a change in the design of IPL's network transformers and required reporting on the number of transformers and network protectors replaced in 2014. IPL changed the network transformer design specification in 2012 to eliminate the termination chamber and instead use a fully insulated bolted bushing-well design. In 2014, IPL installed 10 network transformers, of which all 10 of those replacements utilized the new bushing-well design specifications. Six of the network transformers were new and had been purchased with the new bushing-well design, the remaining four were new transformers that had been sent back to the manufacturer and were converted to the new bushing-well design.

In 2013 IPL completed the retrofit of 18 new network transformers that were in stock. Those units were sent back to the manufacturer and were retrofitted to the new design with bushing-wells. Those units are in stock and available to be installed as needed. There have been no failures on any of the transformers with the new termination design.

IPL replaced 13 network protectors in 2014. Three of the network protectors that were replaced had aluminum bus. There are 38 remaining aluminum bus network protectors on the system.

3.2 Recommendation #6 – Inspection Technology

This open item related to the technology used for manhole and vault inspections and reporting the results. IPL remains committed to manhole and vault inspections and the manhole and vault inspection program remained on schedule in 2014. IPL completed 786 manhole inspections and 82 vault inspections in 2014. The field crews continue to use the tablet computers for the inspections. The tablets are meeting the needs of the field crews and back office staff in its ability to gather the data and transfer it to the asset management software application. IPL continues to review the effectiveness of the hardware and software to determine if changes are needed.

4.0 Conclusion

IPL remains committed to assuring the safe and reliable operation of the Downtown network system. IPL has changed processes, procedures, and design specifications for the Downtown network system to achieve and continue the commitments made to address the recommendations in the 2011 O'Neill Report.

This is intended to be the final report in connection with the 2011 Network Assessment conducted by the O'Neill group. IPL has completed all commitments and reporting requirements agreed to in IPL's response dated January 19, 2012 to the O'Neill Report.

Appendix A – O'Neill Report Recommendations and IPL Commitments as of December 31, 2014

Tier 1 Recommendations and status as of December 31, 2014

Recommendation	Status related to O'Neill recommendation
1 - Citizens Energy Coordination	Complete
2 - Enhanced inspections	Complete
3 - Material standards	Complete
4 - Network protectors and transformers	Complete
5 - Asset management	Complete

IPL Tier I Commitments and Status as of December 31, 2014

Recommendation	IPL Commitment	Status related to IPL commitment
1 - Citizens Energy Coordination	Address manholes too hot to inspect	Complete
	Inspect manholes after heat is mitigated	Complete
	Create ongoing coordination and communication	Complete and continuing
	Replace damaged cables	Complete and continuing
2 - Enhanced inspections	Inspection procedure	Complete and continuing
	Audits of inspection	Complete and continuing
	Continuous improvement	Complete and continuing
	Use tablet computers for inspection	Complete and continuing
	Track repairs	Complete and continuing
3 - Material standards	Adjust standard for termination chambers	Complete
	Begin retrofit	Started and continuing
	Install deflector shields	Complete
	Report effectiveness of standards change and shields	Complete, provided report in 2013
4 - Network protectors and transformers	Identify aluminum bus	Complete
	Sample 33% of identified with aluminum bus	Complete
	Inspect and pressure test where evidence of water ingress	Complete by deflector shield strategy
	Pressurize protectors after opened	Complete by deflector shield strategy
	Toluene gas and venting work practice change	Complete, formal practice changed to no long vent NWP
	Seal or replace protectors that will not hold pressure	Complete by deflector shield strategy
	Report 2013 and 2014 replacement volume	Provided reports for 2013 and 2014
5 - Asset management	Additional resources and process	Complete - additional report issued at the end of 2013
	Cable failure database	Complete and continuing
	Ivara software	Complete and continuing
	Failure reporting to IURC	Complete and continuing
	Update cable root cause procedure	Complete
	Condition and impact based maintenance and replacement	Complete and continuing

Tier II Recommendations and status as of December 31, 2014

Recommendation	Status related to O'Neill Consulting recommendation
6 - Inspection technology	Complete
7 - SCADA project	Complete
8 - Small scale technology	Complete
9 - GIS mapping and modeling	Complete
10 - Oil testing and FR fluid	Complete

IPL Tier II Commitments and Status as of December 31, 2013

Recommendation	IPL Commitment	Status related to IPL commitment
6 - Inspection technology	Use tablet computers with business rules for inspection	Complete and ongoing
	Use Ivara software and upload from tablets	Complete and ongoing
	Evaluate option to show Citizens facilities on IPL tablets	Complete
	Review the inspection results, audit findings and inspection processes annually	2012 review complete. Practices and procedures in place for future years
	Report results at the end of 2013 and 2014	Complete, reported results at the end of 2013 and 2014
7 - SCADA project	Update of deployment plan	Complete
	Review benefits, users, practices	Complete
	Issue final business practices	Complete
8 - Small scale technology	Thermal imaging	Complete and ongoing
	Fault detectors	Complete
	Swiveloc™ lift/locking manhole covers in selected locations	Install complete - reported on effectiveness in 2013 report
9 - GIS mapping and modeling	Add CBD details to GIS map	Complete
	Build model of secondary network	Complete
10 - Oil testing and FR fluid	Re-evaluate Dissolved Gas Analysis on network transformers	Complete
	Consider fire retardant fluid	Complete