

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS POWER & LIGHT)
 COMPANY ("IPL"), AN INDIANA CORPORATION, FOR)
 APPROVAL OF CLEAN ENERGY PROJECTS AND QUALIFIED)
 POLLUTION CONTROL PROPERTY AND FOR ISSUANCE OF A)
 CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR)
 CONSTRUCTION AND USE OF CLEAN COAL TECHNOLOGY;)
 FOR ONGOING REVIEW; FOR APPROVAL OF THE TIMELY)
 RECOVERY OF COSTS INCURRED DURING CONSTRUCTION)
 AND OPERATION OF SUCH PROJECTS THROUGH IPL'S)
 ENVIRONMENTAL COMPLIANCE COST RECOVERY)
 ADJUSTMENT ("ECCRA"); FOR APPROVAL OF DEPRECIATION)
 PROPOSAL FOR SUCH PROJECT; FOR THE USE OF)
 CONSTRUCTION WORK IN PROGRESS RATEMAKING; AND FOR)
 AUTHORITY TO DEFER COSTS INCURRED DURING)
 CONSTRUCTION AND OPERATION, INCLUDING CARRYING)
 COSTS, DEPRECIATION, AND OPERATION AND MAINTENANCE)
 COSTS, UNTIL SUCH COSTS ARE REFLECTED FOR)
 RATEMAKING PURPOSES, ALL PURSUANT TO IND. CODE §§ 8-1-)
 2-6.1, 8-1-2-6.7, 8-1-2-6.8, 8-1-2-42(a), 8-1-8.4, 8-1-8.7, 8-1-8.8 AND 170)
 IAC 4-6-1 ET SEQ.)

CAUSE NO. 44242

PREFILED TESTIMONY OF

MACLEAN O. EKE – PUBLIC’S EXHIBIT #4

ON BEHALF OF THE

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

JANUARY 28, 2013

Respectfully Submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR



Scott C. Franson, Atty. No. 27839-49
 Deputy Consumer Counselor

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing *Office of Utility Consumer Counselor Prefiled Testimony of Maclean O. Eke* has been served upon the following counsel of record in the captioned proceeding by electronic service and/or by depositing a copy of same in the United States mail, first class postage prepaid, on January 28, 2013.

Teresa Nyhart
Nicholas K. Kile
Amy A. Davis
BARNES & THORNBURG LLP
11 South Meridian Street
Indianapolis, Indiana 46204
tnyhart@btlaw.com
nkile@btlaw.com
adavis@btlaw.com

Timothy L. Stewart
Anne Becker
Lewis & Kappes, P. C.
One American Square, Suite 2500
Indianapolis, Indiana 46282-0003
TStewart@Lewis-Kappes.com
abecker@Lewis-Kappes.com
atyler@Lewis-Kappes.com
etennant@Lewis-Kappes.com

Jennifer A. Washburn
Citizens Action Coalition
603 East Washington Street, Suite 502
Indianapolis, Indiana 46204
jwashburn@citact.org



Scott C. Franson
Deputy Consumer Counselor

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR
115 West Washington Street
Suite 1500 South
Indianapolis, IN 46204
infomgt@oucc.in.gov
317/232-2494 – Phone
317/232-5923 – Facsimile

TESTIMONY OF MACLEAN O. EKE, P.E.
CAUSE NO. 44242
INDIANAPOLIS POWER & LIGHT COMPANY

I. INTRODUCTION

1 **Q: Please state your name and business address.**

2 **A:** My name is Maclean O. Eke, and my business address is 115 West Washington Street,
3 Suite 1500 South, Indianapolis, IN 46204.

4 **Q: By whom are you employed and in what capacity?**

5 **A:** I am employed by the Indiana Office of Utility Consumer Counselor (“OUCC”) as a
6 Utility Analyst in the Resource Planning and Communication Division.

7 **Q: Please describe your educational background and experience.**

8 **A:** I hold a Master of Science Degree in Civil Engineering from Purdue University; a Master
9 of Science Degree in Management from Indiana Wesleyan University; a Graduate
10 Certificate in Hazardous Materials Management from Indiana University Purdue
11 University (IUPUI), Indianapolis; and a Bachelor of Science Degree in Civil Engineering
12 from Prairie View A&M University, Texas.

13 **Q: Are you registered as an engineer in any jurisdiction?**

14 **A.:** Yes. I am a Registered Professional Engineer in the States of Indiana and Ohio.

15 **Q: What other training have you attended?**

16 **A:** I attended the Practical Regulatory Training–Electrical Industry Program sponsored by
17 the National Association of Regulatory Utility Commissioners (NARUC) and the Center
18 for Public Utilities at New Mexico State University, Albuquerque, New Mexico.

1 **Q: Please discuss your work experience prior to joining the OUCC.**

2 A: Prior to joining the OUCC, I worked for the Indiana Department of Transportation
3 ("INDOT") as a Project Engineer for 14 years. My primary duties at INDOT included,
4 but were not limited to, supervision of construction projects, specification enforcement
5 and interpretation, reports and estimates for construction contracts. In 2004, I became the
6 Principal and Operations Engineer for Moe Construction Company. My primary duties
7 included estimating, scheduling procurement, project scoping, and day-to-day operation
8 of the company. I joined the OUCC in the fall of 2011.

9 **Q: Have you previously provided testimony to the Indiana Utility Regulatory**
10 **Commission ("Commission")?**

11 A: Yes.

12 **Q: What is the purpose of your testimony in this Cause?**

13 A: My testimony discusses: (1) the engineering, procurement and construction ("EPC") and
14 engineering, procurement and construction management ("EPCM") process; and (2)
15 Project contingency costs.

16 **Q: What information did you review in doing your analysis?**

17 A: I analyzed IPL's direct and supplemental testimonies, exhibits and responses to data
18 requests and reviewed information from informal technical conferences with IPL. I also
19 toured the Harding Street generating facility.

II. ENGINEERING, PROCURMENT, CONSTRUCTION **AND MANAGEMENT ("EPC and EPCM")**

20 **Q: Please provide an overview of EPC and EPCM.**

21 A: An EPC is a design and construct contract where a single contractor broadly takes
22 responsibility for all elements of the design engineering, construction and procurement of

1 a project. An EPCM is a management strategy to manage the EPC contract. Under an
2 EPCM, the owner furnishes the Front End Engineering Design ("FEED") and detail,
3 including process integration, procurement, construction supervision and testing. The
4 EPCM controls the entire project, acting as a project general manager.

5 **Q: Does the OUCC accept the IPL EPC contract approach?**

6 A: Yes. The IPL EPC approach is an important one for the project and ultimately the one
7 most reasonable for cost control because a large portion of the risk is shifted to the
8 contractor. Managing complex construction projects such as the environmental
9 compliance projects at both the Petersburg and Harding Street Stations requires a
10 contracting approach that will ensure control of all aspects of engineering, procurement
11 and construction. The EPC contractor must have adequate resources to not only meet
12 schedule milestones, but must maintain flexibility on other areas of the project to
13 minimize risk should difficulties arise. The OUCC agrees with IPL's selection of a
14 single EPC contractor, which allows IPL's engineer (Owner's Engineer) to develop and
15 define project specific design criteria, the design basis, performance guarantees and
16 standards.¹

17 **Q: Does the OUCC have concerns about IPL's role as the EPCM?**

18 A: Yes. IPL will provide its own construction management services and as such will have
19 direct contractual relationships between it and the suppliers and trade contractors. The
20 OUCC believes that IPL's role as the EPCM may possibly create procurement conflicts
21 with the EPC contractor during the design basis and project review phase. The EPC
22 contractor will create the detailed design, with input from IPL. IPL and the EPC

¹ IURC Cause No.44242 Petitioner's Exhibit SC-2

1 contractor will both develop the engineering of the project. Because of multiple parties
2 involved in both of these important phases of the project, the OUCC is concerned with
3 the possibility of project schedule delays, which could cause noncompliance with MATS.

4 **Q: What does the OUCC recommend to help the Commission stay informed on**
5 **potential schedule delays with IPL as EPCM?**

6 A: The OUCC recommends that IPL provide to the Commission its monthly construction
7 progress report to enable the Commission to monitor the execution of the project.
8 Monitoring of project progress and cost estimates will keep the Commission and
9 interested parties informed of any schedule or cost deviations from IPL's proposed
10 project plan.

III. CONTINGENCY

11 **Q: Please define contingency costs.**

12 A: Contingency costs or allowances are the amount added to a cost estimate for the items,
13 conditions circumstances, occurrences or effects to cover unknowns and uncertainties
14 that are not be adequately evaluated from the data on hand at the time the cost estimate
15 was prepared, but must be represented by sufficient funds to cover identified possible
16 undetermined risk.² Contingency costs usually exclude major scope changes.

17 **Q: What is the contingency amount proposed in the IPL cost estimates?**

18 A: Petitioner's Exhibit TWM-S3 ("Pet. Ex. TWM-S3") explicitly showed a contingency of
19 \$24,333,000 or five percent (5%) of the total project cost.³ Pet. Ex. TWM-S3 also
20 showed an additional \$12,500,000 of undetermined costs.⁴ The cost line items

²Charles Yoe (2000) Risk Analysis Framework for Cost Estimation U.S. Army Corps of Engineers,

³ See Petitioner's Exhibit TWM-S3 is attached to Mr. Thomas W. Moore's direct testimony in this Cause.

⁴ *Id.* Owner's Responsibilities and Costs (Undetermined) section.

1 representing the \$12,500,000 undetermined costs were identical to the cost line items
2 under the “known” Owner’s Responsibilities and Costs section. This leads the OUCC to
3 believe that the \$12,500,000 is an additional contingency.

4 Adding the \$12,500,000 of undetermined costs to the \$24,333,000 explicit
5 contingency yields a total contingency amount of \$36,833,000 of total project costs. The
6 total contingency amount of \$36,833,000 does not include any contingency amount built
7 into the EPC contract.

8 **Q: What is the OUCC’s recommendation to monitor the contingency spending?**

9 A: The OUCC recommends that IPL provide the following information to the Commission
10 in its semi-annual environmental tracker filings:

11 1) How the contingency amount contained in the EPC contract is spent and the
12 balance of contingency amount.

13 2) How the IPL (“Owners”) undetermined cost is spent and the balance of amount.

14 3) How the 5% contingency of the total project cost is spent and the balance of
15 amount.

16 **Q: Does that conclude your testimony?**

17 A: Yes.

AFFIRMATION

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



By: Maclean O. Eke
Indiana Office of
Utility Consumer Counselor

Date: 1/28/13