ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

INVESTIGATION BY THE INDIANA UTILITY REGULATORY COMMISSION, UNDER IC §§8-1-2-58 AND 59, TO INVESTIGATE ELECTRIC UTILITY TREE-TRIMMING PRACTICES AND TARIFFS RELATING TO SERVICE QUALITY IN THE STATE OF INDIANA.	**CAUSE NO. 43663**	
	APPROVED:	NOV 3 0 2010
RESPONDENTS: ALL INDIANA JURISDICTIONAL ELECTRIC UTILITIES.		

BY THE COMMISSION:
David E. Ziegner, Commissioner
Aaron A. Schmoll, Senior Administrative Law Judge

On April 1, 2009, pursuant to Ind. Code § 8-1-2-58 and related statutes, the Indiana Utility Regulatory Commission ("IURC" or "Commission") initiated a formal investigation to investigate the policies, guidelines, and practices of its jurisdictional electric utilities relating to tree-trimming, specific provisions in the utilities' tariffs relating to tree-trimming practices, and customer complaints related to the utilities' tree-trimming policies and practices, all of which relate to the reasonableness and adequacy of the service provided by its jurisdictional electric utilities.[1] Anderson Municipal Light & Power ("Anderson"), City of Auburn, Indiana ("Auburn"), Mishawaka Utilities ("Mishawaka") and Richmond Power & Light ("Richmond") (Anderson, Auburn, Mishawaka and Richmond collectively referred to herein as "Municipal Utilities"); Duke Energy Indiana, Inc. ("Duke Energy Indiana"), Indiana Michigan Power Company ("I&M"); Indianapolis Power & Light Company ("IPL"), Northern Indiana Public Service Company ("NIPSCO"), and Southern Indiana Gas & Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. ("Vectren") (Duke Energy Indiana, I&M, IPL, NIPSCO and Vectren collectively referred to herein as "Utility Group"); and Harrison County Rural Electric Membership Corporation ("Harrison"), Jackson County Rural Electric Membership Corporation ("Jackson"), Marshall County Rural Electric Membership Corporation ("Marshall") and Northeastern Rural Electric Membership Corporation ("NREMC") (Harrison, Jackson, Marshall and NREMC collectively referred to herein as "Jurisdictional REMCs") were named Respondents. The Office of Utility Consumer Counselor ("OUCC") and Mr. Charles H. Goodman also participated in this Cause. Hoosier Energy Rural Electric Cooperative, Inc. ("Hoosier"),[2] Indiana Municipal Power Agency ("IMPA"),[3] Wabash Valley Power Association, Inc. ("Wabash Valley"), Indiana Municipal Electric Association, Inc. ("IMEA"),[4] and Indiana

[1] Although not within its full jurisdiction, the Commission invited Wabash Valley Power Association, other Indiana REMCs, Hoosier Energy REC, Inc., and the Indiana Municipal Power Agency to participate in this investigation, as well as any other entities or consumer groups that may have an interest in this proceeding.

[2] Hoosier is a generation and transmission cooperative which generates and supplies electricity wholesale to eighteen member distribution cooperatives.

[3] IMPA and the majority of its member utilities are not regulated by the Commission; however, eleven of IMPA's members remain under Commission jurisdiction for rates and financing.

[4] IMEA's members are municipally owned utilities and include the Respondent Municipal Utilities.

Statewide Association of Rural Electric Cooperatives, Inc. ("Indiana Statewide"),[5] all filed petitions to intervene. No party objected to the requested interventions and all were granted.

Pursuant to notice and as provided for in 170 IAC 1-1.1-15, a Prehearing Conference in this Cause was held on April 23, 2009. By Docket Entry dated April 29, 2009, the Commission issued a preliminary issues list for consideration by the parties in this Cause. On May 13, 2009, the Commission issued its Prehearing Conference Order setting forth a procedural schedule for responding to the preliminary issues list and the filing of initial testimony and exhibits. An Attorneys' Conference was held on October 19, 2009 for purposes of scheduling a filing deadline for responsive testimony and an evidentiary hearing. By Docket Entry dated October 23, 2009, the Commission established a schedule for the filing of additional testimony and an evidentiary hearing.

In accordance with the Prehearing Conference Order, the Utility Group, Jurisdictional REMCs, the OUCC, Hoosier and Wabash Valley responded to the preliminary issues list on June 17, 2009. Mr. Goodman filed a response to the Utility Group's response to the preliminary issues list on June 26, 2009, to which IPL and I&M, IMEA, IMPA, Duke Energy Indiana, NIPSCO and Vectren replied on July 9, 2009. The Commission issued its final issues list for consideration by the parties ("Final Issues List") on June 26, 2009.

By Docket Entry dated August 13, 2009, the Commission notified the parties of the dates and locations for field hearings. Pursuant to notice, duly published as required by law, public field hearings were held on August 31, 2009 in Muncie, Indiana; September 2, 2009 in Indianapolis, Indiana; September 8, 2009 in Seymour, Indiana; September 23, 2009 in Merrillville, Indiana; September 29, 2009 in Fort Wayne, Indiana; and October 7, 2009 in Evansville, Indiana. By Docket Entry dated January 4, 2010, the Commission made all written comments received at the field hearings available through the Commission's website.

In accordance with the established procedural schedule, certain parties prefiled initial/direct testimony on August 19, 2009, responsive testimony on November 20, 2009 and reply testimony on December 18, 2009. On December 10, 2009 the presiding officers, by docket entry, suspended certain language in IPL's tariff. IPL appealed this docket entry to the Commission on December 18, 2009. On December 30, 2009, IPL filed an Objection to and Motion to Strike the Late-Filed Testimony and Exhibit of Phillip E. Ping. At the hearing, the Presiding Officers denied the Motion to Strike and admitted Mr. Ping's late-filed testimony and exhibit over objection into the record as part of Commission Exhibit 1.[6] Transcript at P12-P15. On December 31, 2009, Respondents Jurisdictional REMCs, Wabash Valley, and IPL filed a Motion to Strike Portions of Testimony of Charles H. Goodman. Mr. Goodman filed a response to the motion on January 7, 2010. At the hearing, the Presiding Officers denied the Motion to Strike and admitted Mr. Goodman's testimony and Exhibits into the record. Transcript at N5-N12.

Pursuant to notice, duly published as required by law, an evidentiary hearing commenced on January 5, 2010 at 9:30 a.m. in Room 222, National City Center, 101 West Washington Street, Indianapolis, Indiana. Respondents, Mr. Goodman, Hoosier, IMEA, IMPA, Indiana Statewide, Wabash Valley and the OUCC appeared by their respective counsel. At the hearing, the testimony and exhibits of the parties were offered and admitted into the record and witnesses

[5] Indiana Statewide's member local distribution cooperatives include the Jurisdictional REMCs.
[6] Mr. Ping's testimony was not offered by Mr. Goodman.

were cross-examined. No other members of the public appeared. Proposed orders were filed on March 19, 2010, exceptions to proposed orders were filed on April 20, 2010 and reply briefs were filed on May 11, 2010.

This Commission, having examined the evidence and being duly advised in the premises, now finds that:

1. **Notice and Jurisdiction.** Due, legal and timely notice of the evidentiary hearing in this Cause was given as required by law. Safety, reliability and efficiency are essential components of reasonably adequate electric service and facilities which public utilities are required to provide. Ind. Code § 8-1-2-4. As recognized by the Commission's order initiating this Cause, vegetation management is inextricably linked to the provision of safe, reliable and efficient service. The Legislature conferred upon the Commission the power to carry out the governing statutes, including the requirement that utilities furnish reasonably adequate service and facilities. Ind. Code § 8-1-1-3(g).

Ind. Code § 8-1-2-59 authorizes the Commission to conduct formal investigations provided that the public utility(ies) involved is furnished a statement notifying it of the matters under investigation. As recognized by our Order initiating this Cause, on March 3, 2008, Cause No. 43650 was established in response to a letter from Mr. Charles Goodman relating to IPL's tariffs and tree trimming practices. Mr. Goodman's letter raised a number of generic issues that the Commission found warranted further investigation as they apply to all electric utilities. Our April 1, 2009 Order initiating this Cause named all jurisdictional electric utilities within the State of Indiana as Respondents. The Respondents are subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana. Therefore, the Commission has jurisdiction over Respondents and the subject matter of this Cause.

2. **Responses to Final Issues List.**[7]

ISSUE 1a Explain how vegetation management is important to the provision of safe, reliable and efficient service.

A. Duke Energy Indiana. Jim L. Stanley, President of Duke Energy Indiana, testified that vegetation management is an essential component of Duke Energy Indiana's responsibility and commitment to provide safe, reliable and efficient service. He explained that vegetation management is a means to reduce outages and improve the safety and reliability of the electric service Duke Energy Indiana provides.

B. Harrison. David Lett, General Manager/CEO of Harrison, testified that vegetation management is the most important tool in the provision of safe, reliable and efficient service.

C. I&M. David S. Isaacson, Manager Distribution Systems for the Muncie District of I&M, testified that vegetation that contacts electrical facilities can cause service interruptions that directly impact the reliability of I&M's system. He explained that use of appropriate vegetation management increases I&M's overall efficiency by reducing the number of tree-related service interruptions.

[7] Mr. Goodman filed a Response to the Final Issues List, which was not offered into the record, and is therefore not summarized herein.

D. IPL. Thomas F. Walker, Contract Coordinator in Line Clearing of IPL, testified that vegetation management supports the reasonable continuity of service, avoidance of outages and service interruptions. He explained that tree work is a necessary part of overhead line construction and maintenance programs to supply customers with safe and reliable electric service. This is corroborated by the data provided in Respondent IPL Exhibits GSW-1 through GSW-3.

E. IMEA. Stuart Tuttle, Superintendent of the Auburn Electric Department, testified on behalf of the IMEA. He stated that trees encroaching on overhead electric utility facilities can pose significant public safety risks. For example, downed trees and branches have the potential to bring down high voltage electric lines, increasing the risk of fire or personal injury, and dense vegetation may conceal power lines, endangering children who climb trees, or could otherwise increase the likelihood of accidental contact.

F. IMPA. L. Gayle Mayo, Executive Vice President and Chief Operating Officer of IMPA, noted that not all of the issues raised in the Commission's April 29, 2009 docket entry are applicable to IMPA, as IMPA does not itself perform significant vegetation management.

G. Indiana Statewide. Michael S. Brenner, Manager of Regulatory and Financial Services at Indiana Statewide testified on behalf of the thirty-three (33) non-regulated member electric cooperatives in the State. Mr. Brenner presented Exhibit MSB-2, which provided a summary from the non-regulated electric cooperatives in response to the Final Issue List. Exhibit MSB-2 states that the reliability of service is hindered as vegetation, trees and un-trimmed tree limbs can interfere with power lines during severe weather. This exhibit shows that the majority of outages are due to trees or tree branches.

H. Jackson. Brad Pritchett, Operations & Engineering Manager of Jackson, testified that vegetation management is a crucial tool employed to provide for the public's safety by keeping trees and vegetation from physically touching a high voltage energized power line and preventing electrical contacts.

I. Marshall. Mark Batman, Office Manager for Marshall, testified that proper vegetation management is important to the provision of safe, reliable and efficient electric services. He stated tree contact with power lines will cause lights to blink, or break the power line, resulting in many people being out of power.

J. NIPSCO. Timothy A. Dehring, Senior Vice President, Energy Delivery of NIPSCO, who presented NIPSCO's responses to the Final Issues List, showed that the provision of safe, reliable and efficient service includes preventive measures against outages and one of the best preventative measures is to actively manage vegetation in a reasonable manner so as to avoid such outages.

K. NREMC. Gregg L. Kiess, President and CEO of NREMC, testified that vegetation management is a key factor in NREMC's safety and preventative maintenance programs.

L. Vectren. Jon K. Luttrell, Director of Field Operations of Vectren South, testified that if vegetation adjacent to utility facilities is not properly maintained to avoid interference with electric facilities, the number, frequency and duration of customer interruptions will

increase, also resulting in increased hazardous conditions to the public and to repair crews due to downed or grounded power lines.

M. Wabash Valley. Gary R. Stein, Manager of Engineering of Wabash Valley, testified that improper vegetation management can result in momentary or permanent outages directly impacting transmission reliability, in addition to concerns associated when trees/limbs contact power lines. H. Edward Brooks, who provides forestry consulting services to Wabash Valley, testified that trees and electric lines are not compatible. He stated that trees are the primary cause of extended outages during adverse weather.

ISSUE 1b. Provide any provisions in the utility's tariff that address or incorporate by reference line maintenance, safety, access, and tree trimming practices.

A. Duke Energy Indiana. Mr. Stanley testified that Section 10.1 of Duke Energy Indiana's General Terms and Conditions for Electric Service provides that the customer shall "furnish Company the rights on, over or under Customer's premises necessary to install, operate and maintain Company's other facilities required to supply service to Customer." Mr. Stanley explained that section of its tariff supports their right to conduct power line maintenance, including the trimming of trees.

B. Harrison. Mr. Lett stated that Harrison's tariffs do not address this issue but, rather, vegetation management is addressed in easements signed when new service is connected.

C. I&M. Mr. Isaacson identified the provisions in I&M's Terms and Conditions of Service that authorize access and maintenance, or permit service to be disconnected where a customer does not provide adequate safe access and clearance in front of and around the utility's equipment or where dangerous conditions exist. He also recognized that tree trimming and line maintenance efforts are a partnership with responsibilities on the part of both the utility and customer, by referencing the tariff that recognizes the customer's duty to assist in the acquiring of rights-of-way or tree trimming permits before construction can commence on a line extension.

D. IPL. Ken Flora, Director, Regulatory Affairs of IPL, testified that IPL's tariff I.U.R.C. No. E-16 includes IPL's Rules and Regulations and incorporates the Commission's rules and regulations for electric utilities. He noted that Section 15.2 gives notice that IPL has the right to install and maintain its facilities on the Customer's property, including the right to trim and remove trees.

E. IMEA. Mr. Tuttle stated that it is not uncommon for the municipal legislative body of the municipality to have adopted an ordinance relating to tree trimming practices within the municipality or for tree trimming practices to be the subject of terms and conditions for electric service.

F. IMPA. Ms. Mayo testified that IMPA is not a public utility and it does not have a tariff.

G. Indiana Statewide. Exhibit MSB-2 does not provide any specific tariff provisions that address tree trimming practices.

H. Jackson. Mr. Pritchett testified that Jackson's tariffs reference its Rules & Regulations and its Bylaws, which describe line maintenance, safety and access.

I. Marshall. Mr. Batman testified that Marshall has no tariff items expressly related to vegetation management.

J. NIPSCO. Exhibit TAD-2 explains that "[u]nder the tariff provisions of 'Access to Premises' (General Rules and Regulations Applicable to Electric Service, Section 4) (See Attachment 1), NIPSCO tree contractors are considered 'authorized agents' and they have the right to enter upon the premises of the Customer at all reasonable times for the purpose of maintaining NIPSCO's lines and equipment."

K. NREMC. Mr. Kiess provided copies of NREMC's Terms and Conditions of Service, which provide, in part, that customers will provide easements without cost for the erection and maintenance of NREMC's equipment.

L. Vectren. Mr. Luttrell testified that under Vectren's General Terms and Conditions Applicable to Electric Service, Vectren has a right of access to customer premises to inspect and repair its facilities as necessary, which includes performing activities as necessary to comply with the Commission rules which require compliance with the NESC. He explained that such access is needed for multiple reasons, including the repair and maintenance of lines.

M. Wabash Valley. Mr. Stein testified that Wabash Valley has a FERC-approved tariff that does not include any provisions related to tree trimming practices.

ISSUE 1c. Discuss any Commission rules that address line maintenance, safety, access, and tree trimming practices.

A. Duke Energy Indiana. Mr. Stanley explained that 170 IAC 4-3-1 *et seq.* provides that the rules are to "facilitate the safety and serviceability of all systems." He noted that 170 IAC 4-1-26(a) provides that the 2002 edition of the National Electrical Safety Code ("NESC") are prescribed for overhead and underground construction practice. He concluded that the Commission issued General Administrative Order 2007-3, which adopted the 2007 Edition of the NESC.

B. Harrison. Mr. Lett stated that he was not aware of any Commission rules addressing the issue.

C. I&M. Mr. Isaacson also noted that the Commission's rules adopt the NESC, which includes tree trimming and vegetation management.

D. IPL. Mr. Flora also noted that the Commission's rules require public utilities to operate and maintain the electric facilities in accordance with applicable safety codes including NESC Rule 218.

E. IMEA. Mr. Tuttle was not aware of any Commission rules that specifically address tree trimming practices but noted that it was his understanding that the Commission's rules typically do not apply to municipal electric utilities.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicated that the unregulated cooperatives were unaware of any Commission rules addressing tree trimming practices.

H. Jackson. Mr. Pritchett stated that 170 IAC 4-1-26 references the NESC as the standard for line construction and related activities and 170 IAC 4-3-8 regarding line location, which is related to access.

I. Marshall. Mr. Batman testified that Section 218 of the NESC covers tree trimming.

J. NIPSCO. Exhibit TAD-2 indicated that various, specified Commission rules encompass tree trimming practices within their scope.

K. NREMC. Mr. Kiess testified that he was not aware of any relevant Commission rules.

L. Vectren. Mr. Luttrell explained that the Commission's rules require electric public utilities to maintain and operate their electrical facilities in accordance with applicable safety codes, including the NESC.

M. Wabash Valley. Mr. Stein testified that 170 IAC 4-1-19 through 23 relate to reliability and 170 IAC 4-1-26 sets forth rules for overhead and underground lines, which adopts the 2002 NESC. He stated NESC Rule 218 addresses tree trimming.

ISSUE 1d. Describe how a utility's provision of safe, reliable and efficient service can be adversely affected if rights to access facilities were revised or denied.

A. Duke Energy Indiana. Mr. Stanley testified that if rights to access Duke Energy Indiana's facilities were denied or limited, it would no longer be able to meet its commitment to provide safe and reliable service by engaging in preventative vegetation management.

B. Harrison. Mr. Lett testified that the process of keeping and restoring power would be hindered tremendously if Harrison's access was denied.

C. I&M. Mr. Isaacson testified that if I&M cannot access its facilities to perform vegetation management, overall system reliability will suffer. In addition, public safety as well as the safety of the Company's employees may be compromised.

D. IPL. Mr. Walker testified that trees account for up to 50% of all unplanned outages and that vegetation management is used to prevent or reduce these outages. He explained that IPL must have the ability to go where necessary to trim or remove trees away from power lines and to locate and repair damaged lines, poles and other facilities. Mr. Paul Eads, a Troubleman for IPL, testified that tree trimming and removal prevents outages and permits service to be restored more quickly when outages occur. He also stated that tree trimming protects public and employee safety. Respondent IPL Exhibit GSW-4 showed the relationship between IPL's current three year trim cycle and how tree outages increase each year after the lines are cleared.

E. IMEA. Mr. Tuttle testified that a municipal electric utility's ability to provide safe, reliable and efficient electric service would be adversely affected if existing rights to access distribution facilities for purposes of tree trimming were revised or denied. He noted that trees that come into contact with power lines are the most common cause of power outages -- especially during storms.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that trees are the leading cause of unplanned electrical service interruptions. If a utility is unable to access its facilities, it is left with no means of maintaining the facilities. The utility would eventually be forced to disconnect the service to unmaintained facilities.

H. Jackson. Mr. Pritchett testified that denying access to electric facilities would significantly hamper Jackson's efforts to provide safe and efficient electric service.

I. Marshall. Mr. Batman testified that if access to electric power facilities is restricted, all customers on the power line would receive poor service, blinking lights, extended outages and voltage problems.

J. NIPSCO. Exhibit TAD-2 stated that depending on how access rights would be revised, the costs of vegetation management programs, already one of largest system maintenance expenses, as well as other maintenance programs, could increase sharply. It notes that these costs would ultimately be recoverable expenses and would eventually be paid for by ratepayers. The exhibit asserts that any regulations or requirements that further delay or create new obstacles would decrease safety levels and significantly decrease reliability. The exhibit concludes that if access rights to NIPSCO's facilities on its customers' properties were denied, it would be impossible for NIPSCO to supply power to its customers safely, reliably and efficiently.

K. NREMC. Mr. Kiess testified that if the utility's right to access its facilities is denied, revised, or restricted, public safety, as well as frequency and duration of outages could be negatively impacted.

L. Vectren. Mr. Luttrell testified that the importance of vegetation management was highlighted during the blackout several years ago, which resulted in new North American Electric Reliability Corporation ("NERC") standards related to vegetation. He stated absent access to perform this function, utilities will struggle to maintain service to the degree expected by customers.

M. Wabash Valley. Mr. Stein testified that limiting Wabash Valley's ability to provide the required vegetation management services would directly affect cutting/trimming and would negatively impact safety and reliability. Mr. Brooks testified that if an electric utility's right of access or right to adequately manage its system is restricted, the restricting entity should assume liability for that action.

ISSUE 2. Discuss how many utility personnel are involved in the oversight and implementation of the tree trimming program. Describe their responsibilities with regard to the tree trimming program.

A. Duke Energy Indiana. Mr. Stanley testified that Duke Energy has nine people responsible for oversight and implementation of the Company's Midwest vegetation management, including the Director of Vegetation Management; a Supervisor for the Transmission Program; a Business Consultant, who oversees supplier contracts; and six foresters.

B. Harrison. Mr. Lett testified that Harrison has one staff person and one contracted person involved in its tree program, who are responsible for oversight of the tree trimming contractors.

C. I&M. Mr. Isaacson testified that there are 12 forestry staff (2 Forestry Supervisors, 2 Forestry Coordinators and 8 Utility Foresters) directly employed by I&M or American Electric Power Service Corporation, a wholly-owned subsidiary of American Electric Power Company, Inc. ("AEP"), that support forestry activities for I&M.

D. IPL. Mr. Walker stated that four IPL full-time employees are directly involved in and dedicated to the oversight and implementation of IPL's tree trimming program.

E. IMEA. Mr. Tuttle explained that there are sixteen municipal electric utilities subject to the Commission's jurisdiction, each with a different number of employees. He noted that few municipal electric utilities have employees who are exclusively involved in the oversight and implementation of tree trimming programs.

F. IMPA. Ms. Mayo testified that IMPA's Assistant Vice President of Electric Engineering has responsibility for supervising tree trimming operations on the Anderson 138 kV line.

G. Indiana Statewide. Exhibit MSB-2 indicated that 26 cooperatives have outside contractors perform vegetation and tree trimming and 7 perform tree trimming with utility personnel only. The number of personnel involved ranges from one to four, for those that use contractors; and from four to 33 for those who perform their own vegetation management.

H. Jackson. Mr. Pritchett testified that Jackson has 11 personnel involved in its tree trimming program. He also discussed their responsibilities.

I. Marshall. Mr. Batman testified that the Marshall Superintendent is the primary contact for contract crews.

J. NIPSCO. Exhibit TAD-2 indicated that NIPSCO has three Supervisors of Forestry Operation each with defined areas of responsibility; one is responsible for NIPSCO's eastern distribution area; one is responsible for the western distribution area; and the third is responsible for NIPSCO's transmission corridors.

K. NREMC. Mr. Kiess testified that NREMC has six personnel involved with its tree trimming, in addition to contract tree trimming crews. He stated that NREMC personnel provide budgeting, engineering and operations support.

L. Vectren. Mr. Luttrell testified that Vectren was staffed with an Operation Supervisor who oversees contract tree trimmers. He stated Vectren employs two Arborists who oversee the Company's tree trimming standards and provide input to the Operations Supervisor.

M. Wabash Valley. Mr. Stein testified that two Wabash Valley staff members oversee its vegetation management practices.

ISSUE 3. Describe the training, certification or experience of these personnel.

A. Duke Energy Indiana. Gary Williams, Director, Central Operations, testified that Duke Energy Indiana has six foresters who are members of the ISA and who must meet minimum requirements for experience, licenses, certifications and education.

B. Harrison. Mr. Lett testified that the Harrison staff has no formal certification.

C. I&M. Mr. Isaacson testified that of the forestry staff assigned to I&M, six are International Society of Arboriculture Certified Arborists and nine have four-year professional degrees in a forestry-related field of study.

D. IPL. Mr. Walker testified that three of IPL's employees are certified arborists and licensed pesticide applicators, and are also members of the International Society of Arboriculture. One of IPL's certified arborist also has a Bachelor of Science degree in forestry and 6 years as a consulting arborist in transmission and distribution prior to employment with IPL.

E. IMEA. Mr. Tuttle provided a summary of the education and training of some of the employees of various municipal electric utilities.

F. IMPA. Ms. Mayo testified that IMPA's employee has nearly thirty years of experience in the electric industry.

G. Indiana Statewide. Exhibit MSB-2 indicates that 26 cooperatives rely on contractors, most of whom have on staff certified arborists. Three of the 7 cooperatives that perform tree trimming in-house have certified arborists on staff.

H. Jackson. Mr. Pritchett testified that three of Jackson's personnel maintain Certified Arborists classification.

I. Marshall. Mr. Batman testified that Marshall line personnel have no certification.

J. NIPSCO. Exhibit TAD-2 summarizes the training, certification or experience of NIPSCO's personnel.

K. NREMC. Mr. Kiess testified that NREMC's Chief Forester is a Certified Arborist and Licensed Indiana State Herbicide Applicator.

L. Vectren. Mr. Luttrell testified that the Operations Supervisor has knowledge of the characteristics of the various species of Indiana trees, and the Vectren Arborists are certified by the International Society of Arboriculture ("ISA").

M. Wabash Valley. Mr. Stein testified that Wabash Valley has a Forestry Consultant with over 30 years of line clearance supervisory experience; an employee with over 30 years of experience in line clearance vegetation management; and a registered forester.

ISSUE 4. Discuss any accreditations associated with the utility's tree trimming program. What organizations and what criteria are used by these organizations to qualify for accreditation?

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana's tree trimming program has not sought accreditation. However, he stated the program is based on the ANSI A300, the Shigo Guide and International Society of Arboriculture ("ISA") Best Management Practices.

B. Harrison. Mr. Lett stated that Harrison has no accreditations associated with its right-of-way program.

C. I&M. Mr. Isaacson testified that I&M is not aware of an existing accreditation program for any electric utility's vegetation management program. However, Mr. Isaacson testified that I&M's vegetation management practices adhere to industry standards and best practices, which are discussed throughout his testimony.

D. IPL. Mr. Walker testified that IPL's line clearing has been recognized for six consecutive years as a Tree Line USA Utility by the National Arbor Day Foundation. IPL also complies with the American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning) ("ANSI A300").

E. IMEA. No specific response to this issue.

F. IMPA. Ms. Mayo testified that IMPA's program is not accredited.

G. Indiana Statewide. Exhibit MSB-2 indicates that accreditations associated with one or more cooperatives' tree trimming programs are: ANSI A300, NRECA Safety Accreditation, Indiana Statewide Association of REC's, Utility Arborist Association, Indiana Arborist Association, and Tree Care Industry Association.

H. Jackson. Mr. Pritchett stated that Jackson's tree trimming program is not accredited.

I. Marshall. Mr. Batman testified that Marshall's tree trimming program is not accredited.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO meets or exceeds the ANSI A300 Standards and notes that NIPSCO has received the Tree Line USA Utility recognition from the National Arbor Day Foundation for sixteen consecutive years.

K. NREMC. Mr. Kiess testified that NREMC's tree trimming program is not formally accredited.

L. Vectren. Mr. Luttrell testified that Vectren has satisfied the criteria of the National Arbor Day Foundation and is certified as a Tree Line USA Utility, which requires the Company to adopt pruning techniques similar to those described in "Pruning Trees Near Electric Lines" by Dr. Alex L. Shigo ("Shigo Guide"); and is in compliance with ANSI A300.

M. Wabash Valley. Mr. Stein noted that the company that performs the actual field work is "accredited" by the ISA.

ISSUE 5a. Describe the reliability, safety, and other criteria used in determining if the trees and vegetation require trimming. Discuss the minimum trim clearance distances for all line voltages and whether those distances allow for future growth. Explain how growth rates for specific trees are considered.

A. Duke Energy Indiana. Mr. Stanley testified that Duke Energy Indiana has a preventative vegetation management program, and its distribution lines are currently on a 5 ½ year visual inspection and trim cycle. For transmission lines, company personnel conduct a visual inspection three times a year, with herbicide spray applied every 4 to 6 years, and a 6 to 7 year trim cycle. Mr. Stanley explained that Duke Energy Indiana endeavors to have a minimum of 10 feet of vegetation clearance on primary distribution lines and 5 feet of vegetation clearance on secondary distribution lines. Duke Energy Indiana endeavors to have a minimum clearance of 15 feet for its 69 kV and 138 kV transmission lines and a minimum clearance of 25 feet for its bulk transmission lines. Mr. Williams further explained that in the past, Duke Energy Indiana took a more "species specific" approach; however, in an effort to alleviate problems created by this approach it adopted a 10 foot standard for distribution primary conductor lines.

B. Harrison. Mr. Lett testified that Harrison has minimum clearances of 15 feet in any direction from a single phase line and 20 feet from three phase lines, which allows for growth. He stated that all trees are trimmed to the minimum clearance specifications.

C. I&M. Mr. Isaacson testified that all areas designated for tree trimming are patrolled by a qualified work planner who evaluates trees relative to species, growth rate, proximity to the overhead conductor, risk of interruption, and other outage or safety concerns specific to I&M maintenance standards. With respect to distribution lines, I&M conducts a comprehensive vegetation management approach using a combined strategy of segmented clearing and full circuit clearing. Sections are selected for work during the calendar year based upon a review of factors, which include reliability issues, outage history, customer concerns, and current vegetation conditions. He explained that vegetation on AEP's transmission system is managed on a prescriptive basis, based upon ongoing evaluation of the transmission system through ground and aerial inspections by both Transmission Line and System Forestry personnel. Page 10 of Mr. Isaacson's testimony provided a summary of I&M's clearing widths. He testified that growth rates for specific trees are considered in I&M's integrated vegetation management program plans.

D. IPL. Mr. Walker testified that IPL's criteria used in determining if trees and vegetation require trimming are set forth in the NESC, IPL's Integrated Vegetation Management Plan ("IVM"), NERC and IPL's Transmission System Vegetation Management Plan. He noted that consideration is also given to compliance with Occupational Safety and Health Administration ("OSHA") regulations.

E. IMEA. Mr. Tuttle testified that in general, the municipal electric utilities trim trees away from distribution and transmission lines in cycles, providing examples of utilities that trim in three-year and four-year cycles. He explained that there are several criteria generally used to determine whether a tree needs maintenance: (1) Will the tree grow into the power conductors within the three or four year trimming cycle, causing line malfunctions or outages? (2) Will the tree structure fail within the same time period, causing outages or unsafe conditions? (3) Can any landowners or other individuals accessing the tree come into contact with the power conductors? If the answer to any of the foregoing questions is yes, then the tree is trimmed, as necessary.

F. IMPA. Ms. Mayo testified that IMPA determines if the trees in the Anderson area require trimming based on standard utility practice, primarily aimed at providing safe and reliable service to its communities, and the Anderson 138 kV line is inspected at least once per year.

G. Indiana Statewide. Exhibit MSB-2 indicates that there are several criteria that determine if trees and vegetation require trimming, including safety, the number of times reclosers are having blinks, and the species of the trees.

H. Jackson. Mr. Pritchett testified that a four year cycle works well for the Jackson system. Primary voltage lines are trimmed to 20 feet each side of the center line and secondary voltage lines are trimmed to a minimum six-foott diameter around the wire, which allows for future vegetation growth. He noted that Jackson adheres to the clearances regardless of different growth rates.

I. Marshall. Mr. Batman testified that outage reports are reviewed for cause, as well as field inspections being made. He stated that the minimum clearance is 10 feet, however, its contractor tries to get at least 15 feet of line clearance to allow for growth. He stated that Marshall's contractor considers growth rates.

J. NIPSCO. Exhibit TAD-2 explains that trees are a leading cause of unplanned power outages at most Midwest electric utilities. This exhibit notes that NIPSCO uses both public safety concerns, expressed by the length of time since last trimming, and reliability concerns, expressed by the frequency of tree caused outages, to develop its annual distribution circuit trim schedule. The exhibit states that the clearance specifications take into account future growth rates, wind displacement of conductors, swing & sway of trees during high winds, maximum sag of conductors, electrical clearance requirements (i.e. flashover distances) and other factors. Exhibit TAD-2, Attachment 4 sets forth the guideline clearances for distribution facilities and Exhibit TAD-2, Attachment 5 contains the guideline clearances for transmission circuits.

K. NREMC. Mr. Kiess testified that NREMC has a three to five year trimming cycle. NREMC trims six feet below the neutral and 8 to 10 feet to each side of the conductor, which allows for future vegetation growth. He explained that slower growing hardwood trees are trimmed less aggressively.

L. Vectren. Mr. Luttrell testified that Vectren evaluates tree trimming needs based on years of growth since the last trimming, and circuit performance. He stated poorer performing circuits are made a priority in scheduling tree trimming. The health and structural integrity of trees and prior outage experience are also considerations. He stated that concerns from customers and company employees about the proximity of a tree to power lines will also prompt trimming. Mr. Luttrell provided the minimum desired clearance distances for various line voltages. He stated that trimming to only minimum distances may not accommodate future growth and would require trimming more often than every five years.

M. Wabash Valley. Mr. Stein testified that AEP, which patrols Wabash Valley's transmission lines, identifies those trees that could potentially cause a safety or reliability problem. He noted that Wabash Valley does not clear for a specific distance but rather tries to maintain distance allowing for at least three years' growth on a particular tree.

ISSUE 5b. Explain the cycle for tree trimming in a particular area.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana's service territory is broken into 7 geographical areas, with the entire distribution system on a 5 ½ year trim cycle. He stated that the transmission system is broken into 3 geographical areas which are hot spotted as needed, sprayed with herbicide every 4 to 6 years and trimmed every 6 to 7 years.

B. Harrison. Mr. Lett stated that all areas are trimmed on a four year cycle.

C. I&M. Mr. Isaacson testified that I&M's distribution system is on a performance-based integrated vegetation management program. He stated the Company initiated a plan in 2005 to clear the entire Indiana distribution jurisdiction. After completion of all primary overhead line miles, he explained that I&M will adjust back to a five-year cycle to maintain the clearances obtained through vegetation management techniques. He stated that I&M's practice differentiates between three-phase overhead primary miles and single-phase primary overhead miles. He testified that on the transmission side, I&M initiated a plan in 2005 to clear the entire Indiana jurisdiction transmission system and establish a 4-year cycle for vegetation management on those lines.

D. IPL. Mr. Walker testified that IPL is currently managing its distribution system vegetation management on a three year trim cycle. He stated that urban transmission is trimmed on a three year cycle and rural transmission is trimmed on a five year cycle.

E. IMEA. Mr. Tuttle testified that municipal electric utility tree trimming cycles often are dependent upon tree growth, weather and safety conditions.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that nine cooperatives use a 3 year cycle; 12 use a 4 year cycle; 8 use a 5 year cycle; one uses a 6 year cycle; and one uses an 8 year cycle.

H. Jackson. Mr. Pritchett stated that Jackson utilizes a four year rotation on tree trimming for its system.

I. Marshall. Mr. Batman testified that it takes about four years for the contract crews to rotate around the Marshall system.

J. NIPSCO. Exhibit TAD-2 indicates that multiple factors go into the criteria for circuit trimming, including time since last trim cycle, growth rate of vegetation in the area, health and condition of the vegetation, structural soundness of trees, density of tree population, terrain and land use surrounding lines, priority of customers, voltage of line, ability to have lines fed from other sources, accessibility of the lines and outage experience. It also lists the trim cycles for various types of lines.

K. NREMC. Mr. Kiess testified that NREMC uses a three to five year trim cycle.

L. Vectren. Mr. Luttrell testified that in general Vectren uses a five year distribution trim cycle and a biannual transmission aerial inspection to help identify and prioritize transmission trimming.

M. Wabash Valley. Mr. Stein testified that Wabash Valley uses a "Just-in-Time" maintenance cycle. If trimmed, Wabash Valley tries to obtain at least three years' clearance.

ISSUE 5c. Explain whether practices vary depending on the nature of the area or facilities involved.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana attempts to maintain consistent work practices regardless of the work location.

B. Harrison. Mr. Lett testified that all areas are trimmed on a four year cycle.

C. I&M. Mr. Isaacson testified that I&M's distribution clearing requirements vary depending on the section of the circuit involved, with clearance requirements increasing in areas (or zones) closest to the power substation where the circuit originates.

D. IPL. Mr. Walker explained that IPL uses different trimming cycles for distribution and rural transmission facilities. Otherwise practices do not vary.

E. IMEA. Mr. Tuttle testified that trees that are near high voltage lines must be trimmed back further than those near low voltage lines.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that the unregulated cooperatives attempt to maintain consistent practices throughout their territory.

H. Jackson. Mr. Pritchett testified that Jackson's practices do not vary based upon area or facilities.

I. Marshall. Mr. Batman stated that Marshall's trimming/clearing practices are the same throughout its service territory.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO's practices, procedures and specifications related to tree trimming are uniform across its service territory and do not vary from one geographic area to another.

K. NREMC. Mr. Kiess stated that in subdivisions a three-year cycle is utilized and along road right-of-ways, NREMC typically uses a five-year cycle.

L. Vectren. Mr. Luttrell testified that to achieve the best management approach for each area, Vectren's vegetation management policies and practices explicitly provide for flexibility depending on various factors, including the type of electrical facility being maintained, the species of the tree, and the location of the tree relative to the facilities.

M. Wabash Valley. Mr. Stein testified that Wabash Valley's practices do not vary based on the area or the type of facility involved.

ISSUE 5d. Explain the size of typical utility easements, and how this relates to the clearances required. If additional clearance is required beyond the existing easement, describe what steps the utility takes to acquire additional easements.

A. Duke Energy Indiana. Mr. Williams testified that easement widths are determined by several factors including the type and voltage of the line, the location of the easement area, and the engineering design for the electric line. He stated that if the Company needs to acquire additional easements or additional rights for an existing easement, it attempts to negotiate those rights with the current property owner. If unsuccessful, Duke Energy Indiana has the right under Indiana law to condemn the needed easement interest. General guideline widths are: distribution single phase 20 feet; distribution three phase 32 feet; transmission 69 kV and 138 kV 100 feet; transmission 230 kV and 345 kV 150 feet.

B. Harrison. Mr. Lett stated that Harrison's easement does not state an exact width, but rather, when sited, the easement is 15 feet on each side of a single phase line and 20 feet on each side of a three phase line. In addition, the easement states that any vegetation endangering the line will be trimmed even if outside the normal right of way.

C. I&M. Mr. Isaacson testified that I&M's distribution easements are typically defined by a centerline description, with no prescribed width. These easements grant the Company the right to cut, trim, or otherwise maintain vegetation that may endanger the safe operation of the electric facilities. Mr. Isaacson stated the easement applies to the property physically crossed by the electric facilities. He stated that I&M's transmission easements are typically bounded easements with specifically defined widths. He testified that I&M outages caused by trees located outside of the right-of-way accounted for 55 percent of all tree-related outages in I&M's Indiana service territory in 2008, excluding major events. He explained that when vegetation growing on a property adjacent to the right-of-way interferes with the safe operation of I&M's lines, control of that vegetation is negotiated with the property owner.

D. IPL. Brenda S. Owens, IPL's Team Leader, real estate and land surveying, testified that rights-of-way vary within Indianapolis and on residential parcels range from zero to 30 feet from the paved roadway. She stated that a title search would be necessary for a definitive description of an existing right-of-way. She noted that IPL's distribution system easements are usually utility easements established by subdivisions and are commonly ten feet in width. She asserted that obtaining new easements would be a massive undertaking that would be extremely expensive and time-consuming. She also stated that IPL has numerous easements associated with its transmission lines, which are generally 100 feet in width, but range from 50 to 200 feet in width.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 showed that easements can vary from 10 to 20 feet.

H. Jackson. Mr. Pritchett testified that easements are obtained for forty foot widths for primary voltage lines. Jackson does not obtain easements for secondary voltage lines. Additional easements are obtained by working with the property owner.

I. Marshall. Mr. Batman testified that Marshall's private easements are 30 feet. If additional clearance is required, the property owner is contacted.

J. NIPSCO. Exhibit TAD-2 lists typical widths of overhead electric easements, while noting that there are a large number of instances where easements are more or less than indicated. Exhibit TAD-2 indicates that in a situation where NIPSCO does not have the rights to obtain the necessary tree clearances, NIPSCO or its representatives would initiate contact with the affected landowner in order to obtain their consent for the needed work, or would pursue additional permanent easement rights to cover the present and future vegetation clearing.

K. NREMC. Mr. Kiess testified that easements range from seven to 30 feet, and that regardless of the width of the easement, NREMC tries to obtain the same clearances. He explained that NREMC works with the property owner to trim beyond the easement and rarely acquires additional easements.

L. Vectren. Mr. Luttrell explained that a large part of Vectren's transmission and distribution system is located in public right-of-way and as a result, easements often are not required to maintain the system. Where easements are necessary, the widths vary depending on the facilities and potentially on negotiations with the landowner. He stated that if additional clearance is required beyond the existing easement or public right-of-way to remove vegetation that poses a problem to safe and reliable operation of the system, the Company will attempt to reach an agreement with the customer to remove vegetation beyond the easement. In other instances, the Line Clearance Department will contact the Land Services Department to negotiate additional easement as necessary.

M. Wabash Valley. Mr. Stein testified that 20 percent of Wabash Valley's non-JTS transmission lines reside on private easements, which vary greatly as they are negotiated on a case-by-case basis.

ISSUE 6a. Describe the standard used by the utility when trimming trees, including practices that protect the health of the trees and reduce undesirable re-growth patterns. Explain whether tree aesthetics or the overall health of the tree is considered under this standard.

A. Duke Energy Indiana. Mr. Judson R. Scott, a Registered Consulting Arborist, testified that to protect tree health, Duke Energy Indiana follows the ANSI A300 (Best Management Practices Utility Pruning of Trees, 2004); and the Shigo Guide. To promote safety, Duke Energy Indiana follows the ANSI Z133.1-2006. Mr. Scott testified Duke Energy Indiana's foresters often make extra efforts to work with customers to ensure that line clearance is performed in a manner that is acceptable to the customer while meeting ANSI A300 standards. However, dependent on a tree's structure and proximity to the electric lines, there are times when it is not possible to consider the aesthetics of the tree because tree power line contact exposes the public to an undue risk of harm. He stated that power line maintenance cannot always be performed with good tree aesthetics as a goal. He also explained that whether the overall health of the tree is considered is contingent upon a number of variables.

B. Harrison. Mr. Lett testified that Harrison's standard is to clear trees approximately twenty feet in all directions for three phase lines and approximately 15 feet for single phase lines, to allow for a 4 year trim cycle. He explained that if trimming endangers the tree, Harrison will usually remove it. He stated that tree aesthetics are not the primary concern.

C. I&M. Mr. Isaacson stated that minimum clearance for distribution system lines is that distance that will prevent re-growth into any I&M conductors for a minimum of three years. The tree species, site, limb and conductor sag and sway during windy conditions, and the effect of electrical load are all considered when determining the clearance requirement. He testified that in achieving this objective, I&M's vegetation management practices are conducted in accordance with ANSI A300. He acknowledged that after considering aesthetics, tree health, and clearance requirements, there are times when tree removal is the best option to pursue with a property owner.

D. IPL. Mr. Walker testified that IPL uses the following standards: (1) ANSI A300; (2) the Shigo Guide; and (3) The International Society of Arboriculture Best Management Practices Utility Pruning of Trees ("ISA Best Management Practices").

E. IMEA. No specific response to this issue.

F. IMPA. Ms. Mayo testified that IMPA's contractor, Nelson Tree Service, follows all applicable ANSI and OSHA standards.

G. Indiana Statewide. Exhibit MSB-2 states that nearly all unregulated cooperatives comply with the ANSI A300 standards.

H. Jackson. Mr. Pritchett testified that Jackson's standard trim is 20 feet each side of the line, with a minimum Rural Utility Service standard of 10 feet each side. He noted that tree aesthetics and/or the overall health of the tree are considered.

I. Marshall. Mr. Batman testified that Marshall trims trees to slow/prevent re-growth patterns. He stated that contract personnel are trained to consider tree health. He noted that contractor personnel consider aesthetics, tree health and the location of power lines.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO follows the following standards and practices: ANSI A300 (Part 1); ANSI Z133.1 (Part 1); NESC Part 2, Section 21, 218; OSHA Standards - 29 CFR, Part 1910.269; NERC Reliability Standard FAC-003-1; ISA Best Management Practices: Utility Pruning a/Trees (2004); ISA Best Management Practices: Integrated Vegetation Management (2007); National Arbor Day Foundation's Tree Line USA Utility requirements; NIPSCO Line-Clearance Tree Trimming Specification; NIPSCO Vegetation Management Specification (cross country right-of-ways); and NIPSCO NERC Transmission Vegetation Management Plan.

K. NREMC. Mr. Kiess testified that NREMC's standard is to trim six feet below the neutral and 8–10 feet on each side of the conductor. He explained that NREMC uses drop-crotch pruning. He stated that a three-year cycle has been adopted for areas where tree aesthetics are more likely to influence property values.

L. Vectren. Mr. Luttrell testified that Vectren's trimming standards are based on trimming practices outlined in the Shigo Guide and ANSI A300, which are designed to provide adequate clearances and to maintain the health of the tree. He explained that tree aesthetics are considered but are secondary to the pruning that must be done to have minimum adequate line clearance for the provision of safe, reliable electric service.

M. Wabash Valley. Mr. Stein testified that Wabash Valley always tries to obtain three years clearance. If a problem tree cannot be trimmed without causing tree health or aesthetic problems, Mr. Stein testified that Wabash Valley will seek permission to remove the tree.

ISSUE 6b. Discuss the common best management practices in the industry for tree trimming.

A. Duke Energy Indiana. Mr. Scott testified that common best management practices are found in ANSI A300, the Shigo Guide and ISA Best Management Practices.

B. Harrison. Mr. Lett testified that best practice keeps reliability as high as possible.

C. I&M. Mr. Isaacson testified that industry standards are established by ANSI, which are consistent with the best pruning practices incorporated in the Shigo Guide.

D. IPL. Mr. Walker testified that the ANSI A300, the Shigo Guide and ISA Best Management Practices are common best practices in the industry for tree trimming.

E. IMEA. Mr. Tuttle testified that municipal electric utilities adhere to ANSI, ACRT Inc.[8] and OSHA standards when trimming trees. He explained that the ANSI A300 standards are designed to protect the overall health of the tree.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that nearly all unregulated cooperatives comply with the ANSI A300 standards.

H. Jackson. Mr. Pritchett testified that he considered directional trimming, the Shigo Guide method, and tree removal to be the best practices in the industry for tree trimming.

I. Marshall. Mr. Batman testified that from the utility perspective, the best practice is to remove all trees near power lines.

J. NIPSCO. Exhibit TAD-2 indicates that ANSI A300 & Z133.1 and ISA Best Management Practices embody the best scientific knowledge, techniques and work practices for utility vegetation management and line clearance tree trimming.

K. NREMC. Mr. Kiess testified that NREMC considers drop-crotch pruning to be a best practice.

L. Vectren. Mr. Luttrell testified that many utilities, including Vectren, follow the same trimming practices outlined by the Shigo Guide and ANSI A300.

M. Wabash Valley. Mr. Brooks testified that the best line clearance practice in the industry is utilizing the "Just-in-Time" cycle. Pre-planning line clearance work is another example provided by Mr. Brooks.

[8] ACRT Inc. is an independent vegetation management company that provides services to utilities.

ISSUE 6c. Explain how the utility's vegetation maintenance programs are consistent with industry practice.

A. Duke Energy Indiana. Mr. Scott testified that in his experience, Duke Energy Indiana's foresters and contract tree service crews have always been consistent with industry standards.

B. Harrison. Mr. Lett testified that Harrison's practices are consistent with those of the industry.

C. I&M. Mr. Isaacson testified that I&M's vegetation management practices are conducted in accordance with industry standards established by ANSI.

D. IPL. Mr. Walker testified that IPL adheres to the ANSI A300, the Shigo Guide and ISA Best Management Practices for industry tree pruning.

E. IMEA. Mr. Tuttle testified that municipal electric utilities adhere to applicable ANSI, ACRT and OSHA standards when trimming trees, consistent with industry practice.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that nearly all unregulated cooperatives comply with the ANSI A300 standards, which are standard industry practice.

H. Jackson. Mr. Pritchett stated that Jackson's practices are consistent with industry practice.

I. Marshall. Mr. Batman testified that Marshall's practices are consistent with industry practices and that it utilizes a contractor to trim trees.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO has written industry best management practices and standards into its tree work specifications. NIPSCO has received the Tree Line USA Utility award from the National Arbor Day Foundation each year since the inception of that program.

K. NREMC. Mr. Kiess testified that NREMC's vegetation management program is consistent with the NESC standards.

L. Vectren. Mr. Luttrell testified that many utilities, including Vectren, follow the same trimming practices outlined by the Shigo Guide and ANSI A300.

M. Wabash Valley. Mr. Brooks testified that Wabash Valley's practices are consistent with industry practice.

ISSUE 6d. Discuss the standards for different facilities (e.g. distribution vs. transmission).

A. Duke Energy Indiana. Mr. Williams testified that distribution lines are trimmed on a 5 ½ year cycle and transmission lines are trimmed on a 6 year cycle.

B. Harrison. Mr. Lett explained that Harrison has no transmission voltages.

C. I&M. Mr. Isaacson testified that both I&M distribution and transmission groups follow ANSI A300 (Part 1) – 2008 Standard Practices (Pruning).

D. IPL. Mr. Walker testified that the standards for the distribution system differ from the standards for the transmission system. He explained that in February 2006, NERC adopted new and comprehensive utility vegetation management requirements for transmission lines in North America.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 explains that distribution cooperatives generally do not have transmission facilities.

H. Jackson. Mr. Pritchett stated that Jackson has no transmission lines.

I. Marshall. Mr. Batman noted that Marshall has no transmission lines.

J. NIPSCO. Exhibit TAD-2 indicates that generally, transmission lines have very different management and regulatory requirements when compared to distribution lines because of their higher voltages, critical importance to electric system reliability, and increased likelihood of being sited in cross country right-of-ways.

K. NREMC. Mr. Kiess testified that NREMC is an electric distribution cooperative that has 0.6 miles of transmission line that runs through a parking lot and requires no vegetation control.

L. Vectren. Mr. Luttrell stated Vectren's trimming standards are designed to obtain a 5-year trim cycle maintaining safe, reliable and efficient service and are dependent on the species of tree, the type of facility and the location of the tree relative to the facility. He also summarized Vectren's clearances.

M. Wabash Valley. Mr. Brooks testified that both NESC and OSHA require greater clearance for transmission voltages than distribution voltages.

ISSUE 6e Describe and define "directional pruning."

A. Duke Energy Indiana. Mr. Scott testified that directional pruning is the training of trees so that growth is away from an energized line. He pointed out that directional pruning is promoted by ANSI A300 and promotes tree health by minimizing the need for future pruning.

B. Harrison. Mr. Lett explained that Harrison does not employ "directional pruning."

C. I&M. Mr. Isaacson testified that I&M's use of the term directional pruning is consistent with the definition used by the ISA, which defines it as being accomplished by pruning unwanted branches back to lateral branches or parent stems that are growing away from the facility in question.

D. IPL. Mr. Walker testified that directional pruning is discussed in the ISA Best Management Practices. As explained therein, directional pruning refers to the removal of unwanted branches back to a lateral or parent branch. The lateral branch should be of sufficient size to become dominant, discouraging sprout growth. He noted that directional pruning is also known as "drop-crotch" or "natural pruning" and is used to direct growth away from the electric conductors.

E. IMEA. Mr. Tuttle asserted that the term directional pruning is best defined and explained in the ISA Best Management Practices, which is a companion publication to the ANSI A300 standards.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that directional pruning is an alternative to topping that leaves trees healthier and ultimately reduces line clearing costs.

H. Jackson. Mr. Pritchett defined directional pruning as cutting smaller limbs from a larger limb growing away from the line.

I. Marshall. Mr. Batman explained that his understanding is that directional pruning means to trim a tree to a lateral so that the growth is away from power lines.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO agrees with the description of directional pruning from the publication "Trees and Overhead Electric Wires" developed by the USDA Forest Service and ISA.

K. NREMC. Mr. Kiess defined directional pruning as removing only the limbs that grow towards the conductor without leaving any stubs.

L. Vectren. Mr. Luttrell explained that directional pruning involves removing limbs growing toward electrical facilities at the parent branch or trunk of the tree, which "trains" the tree to grow away from the facilities and protects the tree from disease and infestation.

M. Wabash Valley. Mr. Brooks testified that directional pruning is the removal of branches to obtain necessary line clearance and encourage re-growth away from the line.

ISSUE 6f. Discuss whether replacement trees are offered, and the conditions under which trees would be replaced.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana does not routinely replace trees. However, on a case-by-case basis, if the tree is an obvious or immediate detriment to service reliability, a replacement tree may be offered to assist in securing the removal of the hazardous tree. Mr. Scott testified that had property owners heeded the "Right Tree Right Place" program, they would not have experienced the loss of a tree in the first place. He concluded that to require an electric utility to replace trees that are removed would place an undue burden on the utility that may contractually have the right to trim and remove the trees; or may need to remove trees that should not have been planted in the first place.

B. Harrison. Mr. Lett testified that on some occasions bill credits are offered to the customer to buy replacement trees.

C. I&M. Mr. Isaacson testified that I&M Forestry personnel work with property owners to reach the best solution for all parties involved, and replacement trees are utilized as a means to replace a tree that is incompatible with overhead conductors with a more suitable variety. He testified that it is a case-by-case analysis taking into account the specific situation.

D. IPL. Mr. Walker testified that IPL supports Keep Indianapolis Beautiful's Trees for Tomorrow program and also offers a Tree Voucher when IPL removes a tree.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that tree replacement decisions are made on a case by case basis.

H. Jackson. Mr. Pritchett testified that Jackson has a Tree Replacement Program, which is offered as an incentive to remove trees within its easement.

I. Marshall. Mr. Batman stated that Marshall offers shrubbery and/or a replacement tree that may be planted away from power lines, if requested.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO has a tree planting program designed to meet the requirements of the National Arbor Day Foundation's Tree Line USA program. A substantial portion of the funds set aside for that requirement is used for replacement trees for tree removals undertaken as part of planned right-of-way vegetation management and line clearance tree trimming work.

K. NREMC. Mr. Kiess testified that NREMC does not offer replacement trees.

L. Vectren. Mr. Luttrell testified that replacement trees may be offered if a customer is reluctant or unwilling to allow the removal of a hazardous tree.

M. Wabash Valley. Mr. Brooks testified that Wabash Valley rarely finds it necessary to offer replacement trees.

ISSUE 7. Describe any changes to the utility's tree trimming practices over the last five years.

A. Duke Energy Indiana. Mr. Williams testified that there have been very minimal, if any, changes to Duke Energy Indiana's power line maintenance practices involving tree trimming over the past five years.

B. Harrison. Mr. Lett testified that Harrison has made no major changes to its practices over the last five years.

C. I&M. Mr. Isaacson testified that in general, the overall manner in which tree trimming work is performed has been consistent over the past five years for I&M's distribution and transmission lines, however, the volume of work performed has increased. He also testified that I&M has increased its efforts in addressing reliability issues due to tree-related outages by removing problem trees and reducing the amount of limbs overhanging primary conductors.

D. IPL. Mr. Walker stated that IPL's tree trimming practices have not changed over the last five years.

E. IMEA. Mr. Tuttle stated that for the most part, municipal electric utility tree trimming practices essentially have remained the same over the last five years, except to the extent necessary to conform to changes in ACRT, ANSI and OSHA standards. He noted, however, that some municipal electric utilities also may have modified their tree trimming practices based on particular circumstances in the community, e.g. the Common Council of the City of Anderson, Indiana adopted an ordinance to increase the level of trimming around Anderson power lines after the ice storm of January, 2005.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that several of the cooperatives have adopted a wider clearance policy after outages due to ice storms and high winds over the last five years.

H. Jackson. Mr. Pritchett stated that Jackson began a pilot "reduced trimming" program, which it has now abandoned, that reduced the trim width.

I. Marshall. Mr. Batman testified that he was not aware of any material changes to Marshall's tree trimming practices that have changed over the last five years.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO's work specifications for its distribution lines have not changed in the last five years, however, the management of the work has improved. During recent years, NIPSCO implemented its NERC-required Electric Transmission Vegetation Management Program that made comprehensive changes to specifications and practices.

K. NREMC. Mr. Kiess stated that NREMC has not implemented any changes.

L. Vectren. Mr. Luttrell testified that there have been no appreciable changes to Vectren's tree trimming practices. He stated Vectren did add the provision of a second door hanger for customer notice of upcoming tree trimming.

M. Wabash Valley. Mr. Stein testified that Wabash Valley has not made any significant changes to its tree trimming practices over the last five years.

ISSUE 8. Discuss when and how the utility communicates with individual property owners prior to tree trimming. Provide an example of the communication the property owner receives.

A. Duke Energy Indiana. Mr. Williams testified that approximately two weeks prior to scheduled power line maintenance, door hanger notification cards are delivered to customers. In addition, crew members are instructed to knock on customers' doors prior to trimming.

B. Harrison. Mr. Lett testified that Harrison attempts to contact every landowner in person or by phone. If unsuccessful, a door hanger is left.

C. I&M. Mr. Isaacson testified that for pre-planned, non-emergency work on the distribution system, each customer of record is sent a letter notifying them of the possibility that

tree work will be performed. The letter is followed by an experienced work planner who determines what work is necessary and attempts to contact each property owner/resident in person. If the work planner cannot make a personal contact, door cards are left at the residence explaining the work that is to be performed which includes a toll-free number to call for additional information. Follow-up visits are scheduled as necessary.

D. IPL. Mr. Walker testified that two months prior to pruning, customers receive a bill attachment notice that pruning is scheduled in their neighborhood; one month prior, they receive a detailed letter; and two weeks prior to pruning, a door hanger is left at the customer's location.

E. IMEA. Mr. Tuttle testified that generally the municipal electric utilities attempt to communicate with property owners in person. If the property owner is not home, a door tag is left with a contact number and the reason for the visit from the electric utility. He explained that under typical circumstances, municipal electric utilities do not attempt to trim or remove any vegetation without prior customer notification and approval when the vegetation is not on an easement.

F. IMPA. Ms. Mayo testified that IMPA's approach to communication with property owners for non-emergency tree trimming maintenance includes at least two weeks advance notice to the property owner regarding why the tree trimming is necessary, which trees will be affected, what company will be performing the tree trimming service, a copy of the applicable utility easement, and an approximate time frame the trimming will occur; contact information for IMPA and a personal follow up visit or phone call to the homeowners; an offer by IMPA to grind down the tree stump(s) or provide replacement tree(s) to the property owner that are appropriate for the location, as the property owner elects; and a copy of the Tree Selection Guide from the Indiana Department of Natural Resources.

G. Indiana Statewide. Exhibit MSB-2 indicates that all unregulated cooperatives have personal communication with each landowner.

H. Jackson. Mr. Pritchett testified that Jackson includes a map of the areas to be trimmed in its newsletter. Jackson then sends a letter to the customers as the time for trimming approaches. Customers are requested to call Jackson if they have specific concerns.

I. Marshall. Mr. Batman stated that a tree contractor will leave a notice when trimming trees in an area.

J. NIPSCO. Exhibit TAD-2 indicates that every residence is contacted during the work planning phase either by direct communication or door hanger. The contractor arborist work planner makes contact with all property owners where tree removal is considered over pruning. Also, NIPSCO requires contractor tree crews to knock on the residence's door to inform them of the beginning of work within yard areas.

K. NREMC. Mr. Kiess testified that NREMC uses direct contact or door hangers.

L. Vectren. Mr. Luttrell testified that each trimming contractor's Work Planner makes personal contact with the property owner at the time work is identified. If the owner is not present, a door hanger is left detailing the work to be done on their property and providing local and toll free phone numbers. If there is no building to leave a hanger on or there is no

response to the door hanger within three days, the Work Planner will attempt to contact the customer by phone or by mail. If the customer cannot be contacted, trimming does not occur for one week from the date of mailing.

M. Wabash Valley. Mr. Stein testified that Wabash Valley attempts to contact the landowner whenever the work involves a tree removal. A door hanger is left if contact is not made. If a landowner strongly objects to the removal of a problem tree, it is generally trimmed to obtain three years of clearance.

ISSUE 9. Discuss when and how the utility communicates with community organizations, neighborhood groups, etc. Provide an example of the communication community organizations receive. Describe how much outreach the utility has undertaken over the last ten years.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana does not receive many calls or correspondence from community organizations. However, when contacted by such organizations, an employee of Duke Energy Indiana vegetation management may meet with interested customers. Upon customer request, Duke Energy Indiana will schedule a preplanning meeting within a community or organization to occur typically at least three days before scheduled maintenance.

B. Harrison. Mr. Lett testified that to his knowledge, Harrison has never been contacted by a neighborhood group.

C. I&M. Mr. Isaacson testified that I&M's community affairs manager contacts city administration, community organizations, neighborhood groups, and other parties as appropriate. Depending on the requests and interest of the respective parties, I&M attends council meetings, homeowner association meetings, or arranges another forum for informational sessions.

D. IPL. Mr. Walker testified that about three months prior to pruning, registered Home Owner Association ("HOA") presidents receive an information packet with an offer for an IPL representative to address the membership at an upcoming HOA meeting. He stated that IPL has four to five meetings with HOAs annually.

E. IMEA. Mr. Tuttle testified that if the particular community or neighborhood is represented by a homeowners' association, municipal electric utilities typically attempt to verbally communicate with that association.

F. IMPA. Ms. Mayo testified that IMPA's Vice President of Government and Member Services communicates with community organizations, neighborhood groups, etc., prior to a new transmission line coming to a community. He explained that once a line is in place, IMPA generally deals directly with individual property owners.

G. Indiana Statewide. Exhibit MSB-2 states that all unregulated cooperatives use individual contact with each customer in advance of tree trimming.

H. Jackson. Mr. Pritchett stated that Jackson has attended a few neighborhood group meetings to discuss its right-of-way methods.

I. Marshall. Mr. Batman stated Marshall's service territory does not have community groups. Marshall uses its newsletter to advise future areas to be trimmed.

J. NIPSCO. Exhibit TAD-2 indicates that prior to cycle maintenance tree work, NIPSCO's Forestry Operations Supervisors, Community Affairs Managers and contractor arborist work planners make contact with community organizations and local governments to advise them of the planned work and answer any questions.

K. NREMC. Mr. Kiess testified that NREMC uses its newsletter and website to communicate tree trimming practices with its customers.

L. Vectren. Mr. Luttrell testified that Vectren participates in community and neighborhood meetings through the Vectren Speakers Bureau. Vectren also communicates tree related information to customers through bill inserts, its website, and annual Arbor Day materials.

M. Wabash Valley. Mr. Stein testified that the site-specific vegetation management activities of Wabash Valley do not necessitate community communications.

ISSUE 10a. Describe the process and timeline for addressing questions or complaints from neighborhood associations and property owners. How are complaints tracked?

A. Duke Energy Indiana. Mr. Stanley testified that prior to power line maintenance, an initial door hanger notification is left at the property with a toll free number for the Contractor's General Foreman so the customer may express any concerns. Initial concerns or complaints may also be sent to the Duke Energy Indiana call center where all pertinent information is obtained and then sent to the contract employee General Foreman in charge of that area. Customer contact is then generally made within one work day to answer questions or begin resolution. If the contract employee cannot resolve the complaint or concern, it is assigned to a Company forester.

B. Harrison. Mr. Lett testified that any member with a complaint is contacted, a timeline is used, and complaints are usually tracked in Harrison's service order system.

C. I&M. Mr. Isaacson testified that since each neighborhood association and individual property owner situation is unique, I&M forestry personnel are accustomed to working with each one to meet their mutual needs. I&M strives to respond and resolve customer issues in a timely manner, which is commonly within 30 days of initial contact. He stated that complaints are kept in an electronic repository that facilitates tracking and resolution.

D. IPL. Mr. Walker explained that a customer may request an on-site meeting prior to pruning. On the day of pruning, all work will be stopped if a customer has concerns. An IPL representative may be contacted if the contractor cannot resolve the issue. He stated that IPL attempts to resolve issues within 24 hours.

E. IMEA. Mr. Tuttle stated that most municipal electric utilities attempt to respond to neighborhood association or property owner questions and complaints related to tree trimming on the same day they are received. He asserted that the municipal electric utilities generally have a policy of addressing complaints before the tree trimming work begins, and if an issue arises while trimming is being performed, the municipal electric utilities typically stop work immediately until the issue is resolved.

F. IMPA. Ms. Mayo testified that questions or complaints from the local community are dealt with on an individual basis as they occur, usually prior to the tree trimming event, as advance notice is provided by IMPA.

G. Indiana Statewide. Exhibit MSB-2 states that all unregulated cooperatives make speakers available to civic groups upon request.

H. Jackson. Mr. Pritchett testified that questions or complaints are handled by field representatives of the Operations Manager. A paper file is created on complaints.

I. Marshall. Mr. Batman testified that tree complaints are reviewed and a ticket is prepared. The contractor settles the complaint. Marshall's Line Superintendent follows up with the contractor on complaints.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO's website hosts the NIPSCO Customer Service Handbook which specifically explains how to register a complaint, including vegetation management and tree trimming issues, by calling its 24 hour customer service line or writing a letter. Complaints received by NIPSCO's call center are logged and tracked using a database.

K. NREMC. Mr. Kiess testified that as questions and complaints are received, they are directed to the responsible individuals, with no formal timeline.

L. Vectren. Mr. Luttrell testified that Vectren follows up on all concerns that are raised, generally within the same day and if not, within two business days. Complaints are tracked on the Customer Information System.

M. Wabash Valley. Mr. Stein testified that initial questions are typically initiated at the REMC and communicated to Wabash Valley, who transmits them to AEP, who makes every effort to contact people within 24 hours.

ISSUE 10b. Explain whether this process is set forth in the utility's tariffs or in other communication the property owners and neighborhood associations receive from the utility. Discuss any recourse a property owner may have if the property owner disagrees with a utility's decision concerning tree trimming.

A. Duke Energy Indiana. Mr. Stanley testified that Duke Energy Indiana's process for complaints or disputes is set forth in the customer door hanger. Duke Energy Indiana works to resolve customer concerns over the telephone and, if needed, in person. Most disputes are resolved, but in the rare event that a customer refuses access to his/her property, the Company may have to seek relief in state court.

B. Harrison. Mr. Lett testified that no process is set forth in Harrison's tariffs and that any customer that disagrees with Harrison may contact the Commission or voice their concern at any meeting of the membership.

C. I&M. Mr. Isaacson stated that I&M's tariffs do not expressly describe the complaint resolution process, but I&M includes contact information for its Customer Solutions Center in its customer billings. He testified that I&M attempts to resolve any issues with property owners through informal processes designed to consider the needs of all parties. If a customer needs the assistance of a third party, Mr. Isaacson pointed out that IURC provides a

Consumer Affairs Division, which is designed to handle individual complaints regarding utility service.

D. IPL. Mr. Walker explained the process for addressing complaints and stated that this information is also set forth in Project Cooperation and available on IPL's website.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that the unregulated cooperatives' customers may seek resolution of any disputes from the Company's Directors, who live in their communities.

H. Jackson. Mr. Pritchett stated that the process is not explained in Jackson's tariffs. Customers may escalate their complaint and the Board of Directors is available to resolve the complaint.

I. Marshall. Mr. Batman stated that a member may complain to Marshall's Board of Directors.

J. NIPSCO. Exhibit TAD-2 acknowledges that NIPSCO's tariffs and vegetation management communications materials do not contain any specific reference to a complaint process or timeline. Exhibit TAD-2 explains that those who disagree with a decision concerning tree trimming are advised by NIPSCO to follow the procedure set forth in 170 IAC 4-1-17, which requires that NIPSCO provide them a written response to their complaint. If they are still dissatisfied with the utility's proposed disposition of their complaint, the land owner may request an informal review of the issue by the IURC.

K. NREMC. Mr. Kiess testified that a customer may escalate his/her complaint within the organization.

L. Vectren. Mr. Luttrell testified that the Company's contact information, mailing address, phone numbers, and email address are provided in monthly bills and door hangers, and on its website. If trimming concerns aren't resolved by the contractor's General Foreman, trimming work stops and the Vectren Operations Supervisor tries to resolve the concern. If he can't resolve the concern, it is turned over to the Line Clearance Department for resolution. After the work is complete, the customer can contact Vectren if the customer has an issue with tree trimming, and an Operations Supervisor from the Line Clearance Department will work to resolve the issue.

M. Wabash Valley. Mr. Stein testified that if a landowner seriously objects to removal of a tree, Wabash Valley, through AEP, will generally agree to trim the tree to obtain three years of clearance.

ISSUE 11. Describe whether tree trimming is performed by utility employees or by subcontractors. Explain the process for selecting a subcontractor. Explain how debris removal is handled.

A. Duke Energy Indiana. Mr. Williams testified that vegetation management is performed by contract personnel chosen through a request for proposal. All contractors must

pass safety and financial screening, in addition to demonstrating technical competence. He testified that brush capable of being chipped is chipped and hauled away, unless the customer requests that it remain on the property. For distribution trimming, larger bulk wood is stacked at the tree base for the customer's use. For transmission trimming, the large bulk wood is left at the right of way edge. During storm related line clearance, no wood or brush removal is performed because the priority is to restore power.

B. Harrison. Mr. Lett testified that tree trimming is done by contractors, chosen based on past history and references. He stated that any debris too big to chip is left on the property.

C. I&M. Mr. Isaacson testified that all planned vegetation management physical work is performed by contractors, chosen by competitive bid. He stated that historic performance, competitive pricing, and a record of working safely are the primary components evaluated during bid analysis. He noted that I&M has a long-standing practice of removing debris by handling branches, limbs, and wood in the most economical and practical manner possible.

D. IPL. Mr. Walker stated that IPL's vegetation management is performed by third party contractors selected through a competitive bidding process. He explained that IPL's procedures require debris from routine vegetation management to be removed within 48 hours.

E. IMEA. Mr. Tuttle testified that municipal electric utilities typically rely on their own employees as well as contractors.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that selection of a contractor is based upon a combination of factors including reputation, bid, quality of work, certification and safety record. Sometimes it is based upon bid price.

H. Jackson. Mr. Pritchett testified that Jackson uses both contractors and in-house trimming crews. He stated that cost is a major factor in the contractor selection process, as is the ability to timely complete the contract. Crews are responsible for debris as worked out between the property owners and Jackson's right-of-way coordinators.

I. Marshall. Mr. Batman testified that the majority of Marshall's tree clearing is performed by contractor personnel, chosen on the basis of price and quality. He stated that brush is run through a chipper and hauled away.

J. NIPSCO. Exhibit TAD-2 indicates that both employees and contractors perform tree trimming and removal work. NIPSCO selects contractors after performing routine due diligence research and after receiving and reviewing their qualifications.

K. NREMC. Mr. Kiess testified that tree trimming is performed by both in-house crews and contractors, which are chosen after a review of training, reputation, equipment condition, and safety records. He stated that debris is removed from the site.

L. Vectren. Mr. Luttrell testified that Vectren's tree trimming is performed by contractors and managed by the Company. Trimming contractors are selected based on safety records, references, performance evaluation, equipment, insurance, and cost. For trimming of

landscaped areas, brush is chipped and larger wood is stacked at the tree base. On rough right of ways, cut wood is stacked at the right of way edge. During storm damage restoration, debris removal is the property owner's responsibility.

M. Wabash Valley. Mr. Stein testified Wabash Valley hires AEP to perform vegetation management. He noted that this arrangement has been in effect for approximately ten years. Debris from tree trimming is chipped and removed from the site or left at the site with the landowner's approval.

ISSUE 12. Explain what instructions/training the tree-trimming crews receive regarding interaction with property owners.

A. Duke Energy Indiana. Mr. Williams testified that all Duke Energy Indiana contract crews are instructed to respect customers and their property, and to leave customers' property in the same or better condition as when they first arrived. Contractors are to communicate work plans and trimming practices to customers and to notify the Duke Energy forester of unresolved customer concerns. The Company has zero tolerance for contractor rudeness, and requires at least one bilingual employee on the crew at all times.

B. Harrison. Mr. Lett testified that all crews are instructed to explain the need for trimming.

C. I&M. Mr. Isaacson testified that contract work planners interact with property owners prior to a tree crew performing planned, non-emergency work. I&M works closely with these individuals to ensure that the information is presented in a clear and consistent manner. The tree crews are instructed to treat property owners with respect and are instructed to respond to property owner inquiries in a courteous and respectful manner.

D. IPL. Mr. Walker testified that all contractors are required to perform vegetation management work in accordance with Project Cooperation, which includes customer notice and dispute resolution.

E. IMEA. Mr. Tuttle testified that tree trimming crews communicate basic information to customers, and if the customer is not satisfied, the crews are instructed to stop trimming and, in most cases, call a representative of the municipal electric utility.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 states that 18 cooperatives responded that a supervisor is to interact with the property owner, and 15 cooperatives responded that crews are provided training by the Company or by Indiana Statewide.

H. Jackson. Mr. Pritchett stated that respect and courtesy are continually stressed to Jackson's employees and contractors.

I. Marshall. Mr. Batman testified that Marshall's contractor trains its own personnel.

J. NIPSCO. Exhibit TAD-2 indicates that in addition to routine job-site briefings and take-home materials on quality customer service principles provided by contractors to their

crews, two full days per year of joint NIPSCO/contractor classroom training are provided to front line workers, to ensure quality work techniques and customer service.

K. NREMC. Mr. Kiess testified that all crews are expected to be courteous, knowledgeable and respectful.

L. Vectren. Mr. Luttrell stated that the contractors are to work in a professional, cooperative, and efficient manner. Contractor foremen are to courteously explain their work plans and trimming practices. If the foreman cannot resolve a customer concern, activity related to the concern is to stop and the Vectren Operations Supervisor is to be called to resolve the concern.

M. Wabash Valley. Mr. Stein testified that tree trimming crews have very little contact with property owners.

ISSUE 13. Are utility personnel located in the relevant neighborhood when trimming is being done? If no, discuss whether utility personnel are dispatched to be on-site to address problems that arise with property owners, or whether tree trimming crews are expected to address these situations. Further, describe any customer service standards that the utility has implemented.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana foresters are not present daily in each of their responsibility areas. However, they are available by phone and within minutes of learning of a customer concern the forester attempts telephone contact. If needed, a site visit is set within two working days or less, dependent on the severity of the complaint. The Contractor's General Foreman is the initial contact for customer concerns and he is in the field with the crews 90% of the time.

B. Harrison. Mr. Lett testified that utility personnel are often in the general area of tree trimming daily, and if a problem arises, Harrison personnel speak with the landowner. Mr. Lett explained that the vast majority of Harrison's customers would rather have trees trimmed if that keeps the power on.

C. I&M. Mr. Isaacson testified that depending on the particular circumstances and specific arrangements made during the contact phase of each work assignment, an I&M forestry staff member may be on site in a neighborhood or at a particular residence. However, regardless of the circumstances prior to the tree crews working in an area, forestry staff is on call to respond when and if the need arises. Each tree crew is under the direct supervision of a qualified general foreman.

D. IPL. Mr. Walker stated that often times IPL personnel are in the area being trimmed. IPL personnel are also available by phone.

E. IMEA. Mr. Tuttle explained that if a municipal electric utility uses a contractor, utility personnel often are not in the neighborhood when the trimming is being done, however, due to the relatively small size of their assigned service areas, municipal electric utility personnel generally can respond to issues within a particular neighborhood within 15 to 30 minutes.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that more than half of the unregulated cooperatives have utility personnel in the general area when trimming is done.

H. Jackson. Mr. Pritchett testified that Jackson employees are usually in the same area when trimming is performed. Issues are promptly and appropriately settled.

I. Marshall. Mr. Batman stated that its Contractor is expected to address tree trimming situations.

J. NIPSCO. Exhibit TAD-2 states that NIPSCO personnel are not typically on a work site given the large number of circuits, streets and communities where tree work is taking place on any given day. However, NIPSCO's radio system, mobile phones, e-mail, etc. allows NIPSCO personnel to respond to a property owner issue very quickly via a phone contact in the event the need arises.

K. NREMC. Mr. Kiess stated that contract crews are visited by an NREMC employee at least daily. If an issue arises, NREMC personnel may be at the site within an hour or less.

L. Vectren. Mr. Luttrell stated its Operations Supervisors are in the field the majority of their day and are available by phone and in person to respond to operational concerns such as tree trimming. The Contact Foreman may address customer concerns, but if the concern cannot be quickly resolved, the Company's Operations Supervisor will address the concern by phone or in person. Work related to the issue stops until the customer concern is resolved.

M. Wabash Valley. Mr. Stein testified that Wabash Valley employees are rarely at a worksite.

ISSUE 14. Explain any call center practices or policies for handling contacts from property owners. Describe how these practices or policies may differ if the property owner has advance notice or not.

A. Duke Energy Indiana. Mr. Stanley testified if a customer reports an outage caused by a fallen tree or branch, the call center sends a trouble ticket to the control center and personnel are dispatched to restore service. If a customer calls to report that preventative line clearing is needed, the call center representative collects the relevant information. If a property owner that has received advanced notice of tree trimming contacts the call center with concerns, the information is sent to the contract employee in charge of the specified area. Any concern that cannot be resolved by the Contract Foreman will be addressed by the Company Forester.

B. Harrison. Mr. Lett testified that Harrison makes a log of the call.

C. I&M. Mr. Isaacson testified that if I&M receives a call regarding vegetation management work, the Customer Solutions Center Associate ("CSA") provides the customer with the most up-to-date information available. He stated that all calls are handled in a consistent manner. The CSA explains the vegetation management work being performed in the area using information provided by distribution and/or transmission forestry personnel.

D. IPL. Mr. Walker testified that if a customer calls the IPL Call Center, the call is forwarded to the IPL Line Clearing office. The customer's information is entered into a work

ticket and passed along to the IPL personnel responsible for the customer's area. Mr. Walker stated that IPL also maintains a Tree Manager Database.

E. IMEA. Mr. Tuttle testified that these practices vary from utility-to-utility and are likely dependent on the size of the utility.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that in the case of an emergency, the call is directed to the on-call supervisor.

H. Jackson. Mr. Pritchett stated that call center personnel will make a "ticket" and forward to the Right-of-Way Assistant, unless there is an indication that it requires immediate attention, in which case an assistant in the field is notified.

I. Marshall. Mr. Batman testified that calls are answered by administrative personnel and management personnel obtain the information. Comments are passed to Marshall's contractor.

J. NIPSCO. Exhibit TAD-2 states that if a customer contacts the call center a Customer Service Representative ("CSR") creates a Tree Ticket, which gets sent to the Local Operating Area and dispatched to the tree contractor for inspection and appropriate follow up. If there is a concern with the way NIPSCO-sponsored tree trimming has taken place, a "Tree Complaint" form is completed, which is sent directly to Forestry Operations for follow up. All complaints are logged in a database and analyzed on a regular basis to look for trends as well as to identify areas for improvement.

K. NREMC. Mr. Kiess testified that when a call is received a service order is generated. The practices and policies do not differ depending upon whether the customer has received advanced notice of the tree trimming.

L. Vectren. Mr. Luttrell testified that if the Company call center is contacted by someone with a concern about planned or ongoing trimming, the call is transferred to the Line Clearance Department to answer any questions or resolve any concerns. However, typically customer concerns are eliminated by the customer notice process and contact with the Contractor's work planner. For non emergency reports of vegetation near facilities, the Call Center enters a work order to the Line Department. Emergency reports of tree and power line contact are responded to immediately.

M. Wabash Valley. Mr. Stein testified that Wabash Valley does not operate a call center. He noted that concerns are typically initiated at the local REMC level.

ISSUE 15. Describe any accreditations the utility's contractors or their subcontractors are required to have, including the organization and criteria used for accreditation.

A. Duke Energy Indiana. Mr. Williams testified that Duke Energy Indiana's arborists are fully certified. Duke Energy Indiana's vegetation management program is grounded in the ISA guidelines and best forestry practices. All contractors must be professionally trained and familiar with all federal, state, county and municipal statutes, laws, ordinances and regulations pertaining to line clearing.

B. Harrison. Mr. Lett testified that Harrison requires no certifications.

C. I&M. Mr. Isaacson testified that contractors or subcontractors applying restricted-use herbicides must be under the supervision of a certified pesticide applicator.

D. IPL. Mr. Walker testified that the contractor's general manager and three of its contract foreman have either category 6 pesticide certification or ISA arborist certification.

E. IMEA. Mr. Tuttle testified that all contractors are required to be professionally trained to work around energized high voltage power lines. Some municipal electric utilities require that their contractors be accredited Line Clearance Arborists.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that more than ¾ of the unregulated cooperatives, who use in-house personnel for tree trimming, do not require accreditation.

H. Jackson. Mr. Pritchett testified that Jackson requires no accreditation from its contractors.

I. Marshall. Mr. Batman testified that no accreditations are required by Marshall.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO requires all contractors to be OSHA certified for electric line clearance tree trimming operations per federal law. NIPSCO's contract specification requires many different types of credentials, and all of NIPSCO's tree contractor companies are members of the Tree Care Industry Association ("TCIA"), which has an accreditation program for its member companies.

K. NREMC. Mr. Kiess testified that contractors must maintain state/federal licensing requirements.

L. Vectren. Mr. Luttrell testified that Vectren requires its line clearance contractors to adhere to ANSI A300 and the Shigo Guide; which meets one of the requirements for becoming a Tree Line USA Utility. Trimming contractors are members of the TCIA and are also certified in Electrical Hazard Awareness Program.

M. Wabash Valley. No specific response to this issue.

ISSUE 16. Discuss whether the contracts for tree trimming services include performance incentives. Describe any specific performance characteristics addressed by the incentives, and the extent to which total compensation is tied to performance criteria.

A. Duke Energy Indiana. Mr. Williams testified that all vegetation management contracts include weighted performance incentives, which are based 35% on safety, 25% on quality, 20% on customer service, 10% on productivity/cost effectiveness; and 10% on reporting and recording. Contractor compensation is tied 100% to the performance criteria.

B. Harrison. Mr. Lett stated that Harrison's contracts contain no performance incentives.

C. I&M. Mr. Isaacson testified that the contractor that performs all work on I&M's distribution system has an incentive program entitled "Key Performance Indicators." These criteria include measured accomplishments in safety, efficiency and quality.

D. IPL. Mr. Walker testified that for the distribution and urban transmission system, payment may be withheld and penalties imposed if work is not performed as required. Performance characteristics include: production schedule; reducing customer complaints; cost containment; and ANSI A300 compliance. Penalties are imposed for incomplete debris removal.

E. IMEA. Mr. Tuttle stated that he was not aware of a municipal electric utility contract for tree trimming services that includes performance incentives.

F. IMPA. Ms. Mayo testified that IMPA's contracts for tree trimming services contain no performance incentives.

G. Indiana Statewide. Exhibit MSB-2 indicates that of the few unregulated cooperatives that have performance incentives within their contracts, they tend to be bid incentives.

H. Jackson. Mr. Pritchett stated that Jackson withholds 10 percent of the lump sum contract until the contract has been completed to Jackson's satisfaction.

I. Marshall. Mr. Batman testified that no performance incentives are included in the contract.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO's Distribution Line Clearance Tree Trimming Contract does not contain specific provisions for performance incentives. However, NIPSCO has chosen to institute a Discretionary Performance Bonus, separate of the terms of its contracts, to recognize specific instances of outstanding contractor performance.

K. NREMC. No specific response to this issue.

L. Vectren. Mr. Luttrell testified that there are no performance incentives in Vectren's line clearing contracts.

M. Wabash Valley. Mr. Stein testified that Wabash Valley's contract with AEP does not include performance incentives.

ISSUE 17. Explain how the performance of the tree trimming contractors is measured, including whether performance is measured periodically throughout the life of the contract, annually, or only at the end of the contract.

A. Duke Energy Indiana. Mr. Williams testified that performance is measured by Duke Energy Indiana foresters through audits of completed circuit work and safety reviews of individual crews. Contractors are not paid until circuits have been audited and approved by Duke Energy Foresters. Quarterly performance reviews are conducted based on safety/reliability, quality, customer service, productivity, cost, and reporting/ recording. There is also a year end performance meeting with each contractor.

B. Harrison. Mr. Lett stated that Harrison inspects its contractors' work throughout the life of the contract.

C. I&M. Mr. Isaacson explained that performance of the contractor is measured as assignments are completed. The performance criteria includes adherence to required trimming clearances, ANSI A300 pruning standards and NESC vegetation clearances specified by line voltage, clean-up of debris, and feedback from property owners.

D. IPL. Mr. Walker testified that IPL can and does audit work in progress and/or reported complete for the distribution and urban transmission vegetation management.

E. IMEA. Mr. Tuttle testified that municipal electric utilities track the performance of their outside contractors through visual observation, and some electric utilities track the number of tree-related outages and customer complaints relating to tree trimming.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that a large number of the un-regulated cooperatives measure their contractors' performance based on customer feedback, professionalism, timeliness, and outage and interruption history.

H. Jackson. Mr. Pritchett testified that contractor performance is constantly being monitored by Jackson's field representatives.

I. Marshall. Mr. Batman testified that contractor performance is reviewed monthly.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO's Distribution Line Clearance Tree Trimming Contract does not contain specific provisions for performance incentives. Exhibit TAD-2 stated that NIPSCO has a robust quality control/quality assurance process in place to measure Contractor performance throughout the life of the contract.

K. NREMC. Mr. Kiess testified that NREMC's contracts do not include performance incentives.

L. Vectren. Mr. Luttrell testified that typically bi-weekly review is conducted of each contractor's performance. These reviews include safety, quality of trimming, concerns from customers, any problems noted by the Operations Supervisor, productivity, and any tree related outages in areas they have trimmed.

M. Wabash Valley. Mr. Stein testified that Wabash Valley measures AEP's performance by its responsiveness and by direct feedback from Wabash Valley's REMC members and their consumers.

ISSUE 18a. Describe the utility's tree trimming budget for each of the last 10 years, and how many miles of transmission/distribution lines are covered by the utility's vegetation management program.

A. Duke Energy Indiana. Mr. Williams testified that until 2005, Duke Energy Indiana did not itemize its electric operation budget with enough detail to identify vegetation management dollars. From 2005 to 2008, Mr. Williams stated that $14.3 million was the average budget. He stated Duke Energy Indiana is responsible for maintaining 16,363 distribution miles and over 7,557 transmission miles.

B. Harrison. Mr. Lett presented Exhibit DCL-3, which contained the requested budget information. Mr. Lett testified that Harrison serves approximately 2,200 miles of distribution line.

C. I&M. Mr. Isaacson presented Exhibit DSI-4, which sets forth the Vegetation Management forecast and budgeted actual data for 2004 through 2009 for distribution and transmission. Mr. Isaacson testified that I&M's overhead distribution system in Indiana includes approximately 10,100 line miles of lower voltage distribution lines. I&M's transmission system in Indiana includes approximately 3,300 line miles of higher voltage transmission lines.

D. IPL. Michael R. Shruba, Director, Power Delivery Services, testified that IPL's transmission system includes 457 circuit miles of 345 kV lines and 363 circuit miles of 138 kV lines. The distribution system includes 4,518 circuit miles of underground primary and secondary cables and 5,861 circuit miles of overhead primary and secondary wire. IPL's actual and budgeted line clearing amounts for 1999 through 2009 were provided on Page 3 of Mr. Shruba's testimony.

E. IMEA. While budgets differ from utility-to-utility, Mr. Tuttle provided a sampling of municipal electric tree trimming budgets. For example, Anderson Municipal Light & Power averaged $879,126 over the past ten years, while Lawrenceburg Municipal Utilities averaged $40,000-$65,000 annually.

F. IMPA. Ms. Mayo testified that IMPA does not have a specific line item budget for tree trimming and IMPA's share of the tree trimming costs for its portion of the Joint Transmission System are not budgeted separately from general operation and maintenance expenses.

G. Indiana Statewide. Exhibit MSB-2 indicates that the un-regulated cooperatives vary drastically in terms of their tree trimming budgets and miles covered by their vegetation management program.

H. Jackson. Mr. Pritchett stated that Jackson has approximately 2,800 miles of overhead power lines. Its tree trimming budget for the last ten years was provided on Page 9 of Mr. Pritchett's testimony. For example, in 2009, Jackson's budget was $1.1 million.

I. Marshall. Mr. Batman testified that Marshall has over 1,000 miles of distribution lines. Its actual and budgeted tree trimming expense was shown on Page 10 of Mr. Batman's testimony. In 2008, for example, Marshall budgeted approximately $500,000 but spent more than $600,000.

J. NIPSCO. Exhibit TAD-2 indicates that NIPSCO has nearly 2,800 miles of transmission lines and more than 8,000 miles of overhead line for distribution. The budgeted and actual budgets for transmission and distribution tree trimming were provided on Page 30 of Exhibit TAD-2.

K. NREMC. Mr. Kiess testified that NREMC has 969 miles of overhead distribution lines. He provided budgeted and actual amounts for contract vegetation management but explained that the cost of in-house crews was not itemized.

L. Vectren. Mr. Luttrell provided the budget for tree trimming from 1999 through 2009. He testified that Vectren maintains approximately 3,100 miles of distribution lines and approximately 800 miles of transmission facilities.

M. Wabash Valley. Mr. Stein testified that Wabash Valley's vegetation management budget for the 84 miles of non-JTS transmission facilities has been $50,000 in 2007, 2008 and 2009.

ISSUE 18b. Discuss how this budget compares with the actual expenditures incurred for each of the last 10 years.

A. Duke Energy Indiana. Mr. Williams testified that from 1999 to 2004, Duke Energy Indiana averaged $13.2 million per year for vegetation management. From 2005 to 2008, Duke Energy Indiana's actual expenditures averaged $16.3 million.

B. Harrison. Mr. Lett provided the requested information on Exhibit DCL-3.

C. I&M. Mr. Isaacson provided Exhibit OSI-4, which set forth the Vegetation Management forecast and budgeted actual data for 2004 through 2009 for distribution and transmission.

D. IPL. IPL's actual and budgeted line clearing amounts for 1999 through 2009 were provided on Page 3 of Mr. Shruba's testimony.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that the majority of the un-regulated cooperatives are able to stay within their annual tree trimming budgets.

H. Jackson. Mr. Pritchett testified that Jackson's actual expenditures closely resemble its budgeted numbers.

I. Marshall. The requested comparison was provided on Page 10 of Mr. Batman's testimony.

J. NIPSCO. Page 30 of Exhibit TAD-2 contains the budgeted and actual expenditures for transmission and distribution tree trimming.

K. NREMC. Mr. Kiess provided budgeted and actual amounts for contract vegetation management but explained that the cost of in-house crews was not itemized. In 2009, NREMC budgeted $249,000 but spent $145,101.

L. Vectren. Mr. Luttrell provided the actual expenditures for the last ten years. On average budgeted amounts equaled approximately $2,547,000 and actual amounts equaled approximately $2,330,000.

M. Wabash Valley. Mr. Stein testified that Wabash Valley spent $94,400 for the 84 miles of non-JTS transmission facilities in 2007 and $102,205 in 2008.

ISSUE 19a. Describe how tree-related outages are tracked.

A. Duke Energy Indiana. Mr. Stanley testified that tree-related outages are tracked in the Duke Energy Indiana Outage Management System ("OMS") according to the appropriate cause code. Each outage event recorded includes the starting and ending times, number of affected customers, cause and other pertinent information.

B. Harrison. Mr. Lett testified that all outages are tracked by cause.

C. I&M. Mr. Isaacson testified that AEP's OMS defines tree-related or tree-caused outages as "outage[s] caused by a tree or limb falling into the primary or secondary, or limbs growing into the primary or secondary."

D. IPL. Gregory S. Wood, Manager Distribution Reliability and Planning, testified that tree-related outages are tracked using an OMS. Mr. Wood also showed that the majority of the customer minutes of outage are caused by trees.

E. IMEA. Mr. Tuttle testified that for most municipal electric utilities, the linemen who restore power complete an outage report and indicate the cause of the outage.

F. IMPA. Ms. Mayo testified that IMPA does not separately track tree-related outages.

G. Indiana Statewide. Exhibit MSB-2 indicates that tree related outages are tracked by the un-regulated cooperatives through their OMS.

H. Jackson. Mr. Pritchett explained that outages caused by trees were grouped into one of two categories, trees or trees/winds.

I. Marshall. Mr. Batman testified that tree related outages were not tracked separately until July, 2009.

J. NIPSCO. Exhibit TAD-2 indicates that all outage information is captured in the OMS and resides in the database.

K. NREMC. Mr. Kiess testified that all outages are entered into NREMC's outage database.

L. Vectren. Mr. Luttrell testified that customer outages are tracked in Vectren's OMS by cause.

M. Wabash Valley. Mr. Stein testified that Wabash Valley does not track tree-related outages.

ISSUE 19b. If tree-related outages are tracked, explain how this type of outage is defined.

A. Duke Energy Indiana. Mr. Stanley testified that a tree-related outage is defined as "a power outage, usually resulting in an interruption of service to customers, caused by a tree or other vegetation contacting overhead power lines, poles or conductors."

B. Harrison. Mr. Lett testified that an outage is considered tree related any time a tree or part of a tree contacts the line and interrupts electrical service.

C. I&M. Mr. Isaacson testified that AEP's OMS defines tree-related or tree-caused outages as "outage[s] caused by a tree or limb falling into the primary or secondary, or limbs growing into the primary or secondary."

D. IPL. Mr. Wood testified that a tree or vegetation-caused outage includes outages caused by tree, tree limbs, secondary short due to tree, and service wire short due to tree. This designation is based on visual confirmation by the Troubleman.

E. IMEA. No specific response to this issue.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that many of the un-regulated cooperatives define tree related outages as: weather related; tree needs trimmed; tree has fallen; danger tree (tree will fall); and hazard to members.

H. Jackson. Mr. Pritchett testified that tree related outages are defined as any outage caused by a tree that contacts the power line.

I. Marshall. Mr. Batman testified that Marshall's lineman's report describes the outage cause.

J. NIPSCO. Exhibit TAD-2 states that as with all outages, tree-related outages are assigned in the OMS as a cause relative to the impacted equipment.

K. NREMC. Mr. Kiess testified that if the tree is the major qualifying event for an outage, it is reported as such.

L. Vectren. Mr. Luttrell testified that tree-related outages are classified as vegetation outages as defined in the Institute of Electrical and Electronic Engineers publication "Collecting and Categorizing Information Related to Electric Power Distribution Interruption Events: Data Consistency and Categorizing for Benchmarking Surveys."

M. Wabash Valley. No specific response to this issue.

ISSUE 19c Please provide this information for the last 10 years if available or, in the alternative, for whatever lesser period the data is available.

A. Duke Energy Indiana. Mr. Stanley provided the requested information in Exhibit A-2.

B. Harrison. Mr. Lett provided the requested information in Exhibit DCL-4.

C. I&M. Page 30 of Mr. Isaacson's testimony contains a chart showing the requested data.

D. IPL. Mr. Wood provided the requested information in Exhibit GSW-2.

E. IMEA. Mr. Tuttle provided a portion of the requested information for Anderson and Crawfordsville Electric Light & Power in Exhibit IMEA 6.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that because of tree trimming related programs, only a small percentage of the outages are related to tree trimming.

H. Jackson. The requested information was provided on Pages 9-10 of Mr. Pritchett's testimony.

I. Marshall. Mr. Batman explained that Marshall began tracking tree outages in July, 2009.

J. NIPSCO. Exhibit TAD-2 indicates that since a new OMS was implemented in 2002 information for 2003 and beyond was provided on Page 32 of Exhibit TAD-2.

K. NREMC. Mr. Kiess provided the requested information in Exhibit GLK-11.

L. Vectren. Mr. Luttrell provided the requested information for 2005 through 2008 exclusive of major event days as follows: 2005: 423 outages; 2006: 598 outages; 2007: 518 outages; 2008: 680 outages.

M. Wabash Valley. No specific response to this issue.

ISSUE 20. Identify any additional service area characteristics and other considerations (e.g. geography, land use, population, local ordinances, etc.), not mentioned in response to the above questions that affect the utility's vegetation management plans or matters under consideration in this Cause.

A. Duke Energy Indiana. Mr. Stanley testified that Duke Energy Indiana's service territory is large and diverse, and that Duke Energy Indiana strives to maintain and balance good customer relations with providing reliable, safe, cost effective electric service critical to the welfare of its customers and the State.

B. Harrison. Mr. Lett stated that he was unaware of any local ordinance that affects Harrison's vegetation management program.

C. I&M. Mr. Isaacson testified that I&M's most significant forestry challenges are obtaining the necessary easements for its rights-of-way and striking a balance between customers' trimming expectations and I&M's desired tree removal and trimming clearances. He noted that county and local governments may establish regulations that limit the amount of clearing that can be completed.

D. IPL. Mr. Walker stated that IPL's vegetation management plans reflect conditions within IPL's service area, including the significant tree canopy in Marion County.

E. IMEA. Mr. Tuttle concluded that he did not believe it necessary for the Commission to adopt any rules relating to municipal electric tree trimming practices, as municipal electric utilities have direct, personal contact with their customers related to trimming

trees, and their policies are governed by local ordinances and overseen by the local government of their respective municipality.

F. IMPA. No specific response to this issue.

G. Indiana Statewide. Exhibit MSB-2 indicates that un-regulated cooperatives serve rural areas and that the cooperatives are member owned, ensuring that the cooperatives are considering the needs of their members and the safe operation of the utility.

H. Jackson. Mr. Pritchett testified that keeping the vegetation under control is extremely vital to maintaining a safe and reliable electric system.

I. Marshall. Mr. Batman testified that in rural areas, for many miles, power lines are surrounded by farm fields and woods. He noted that in residential areas, yard trees present special problems and need to be trimmed so that children cannot contact power lines while climbing trees.

J. NIPSCO. Exhibit TAD-2 indicates that it is NIPSCO's intention to promote public safety and service reliability, as well as meeting regulatory specifications.

K. NREMC. None.

L. Vectren. Mr. Luttrell testified that the Emerald Ash Borer (EAB) infestation will greatly affect the number of trees the company marks for removal on an annual basis.

M. Wabash Valley. No specific response to this issue.

3. Direct Testimony.[9] Cynthia M. Armstrong, Utility Analyst for the OUCC, described the nature of customer complaints that the OUCC has received related to tree trimming; provided an analysis of best practices for vegetation management, including customer relations and public education; discussed Indiana investor-owned utility tariff provisions related to tree trimming; and provided recommendations for the next steps in this investigation as well as recommendations for standards the Commission should establish as a result of this investigation. Ms. Armstrong testified that the OUCC received 49 complaints, inquiries, or other comments related to this investigation as of August 19, 2009. Although, Ms. Armstrong testified that tree trimming complaints appear to make up a relatively small percentage of all utility consumer complaints received by the OUCC over the past three years, she noted that some consumers were angry with IPL to the point of filing class-action lawsuits. She noted four general types of complaints the OUCC has received from consumers regarding utility tree trimming practices. The first and most common type of complaint involves notice of tree trimming. Customers complained that they did not received adequate notice or, in some cases any notice, of utility tree trimming on or near their property. Other customers complained that they were unable to reach the appropriate utility personnel to discuss the proposed trimming. Although all respondent utilities have notice procedures in place, it appeared that these procedures have not been uniformly implemented. The second type of complaint pertained to tree trimming debris that is not being removed from consumers' property in a timely manner. The third type is that trees outside the utility right-of-way are dying after the utility trims limbs that encroach upon the utility ROW. The fourth complaint revolves around consumers' concern

[9] As the issues identified by the Commission in its Final Issues List pertained to the Respondent electric utilities, the OUCC Direct Testimony filed on August 19, 2009 presented general observations on the issues.

that vegetation may impact the reliability of their service. Ms. Armstrong noted that consumers would have the opportunity to comment further on utility tree trimming practices through the field hearings in this Cause.

Ms. Armstrong provided a summary of how utility tariffs implicate tree trimming. She noted that IPL was the only utility that presented a tariff provision, Section 15 of IPL's Rules and Regulations, which directly related to tree trimming. She also stated that I&M's tariff specifies an obligation "to use reasonable diligence in furnishing a regular and uninterrupted supply of energy". NIPSCO's tariff states that "authorized agents", such as tree trimming contractors, have the right to enter upon the premises of the customer at all reasonable times for the purpose of maintaining NIPSCO's lines and equipment. She observed that an individual consumers' ability to challenge any utility's vegetation management practice pursuant to an approved tariff is difficult. Ms. Armstrong testified that a review of other Indiana utility tariffs led her to believe that there is not a clear or consistent standard forming the basis for tree trimming practices across Indiana electric utilities. Based upon her analysis of vegetation management best practices, Ms. Armstrong recommended the following:

First, the Commission should require utilities to comply with the 2007 NESC and follow ANSI A300 procedures to the extent adopted or modified to the Commission's directives. Second, debris should be removed by the utility after it completes tree trimming. Third, customer notices should be provided in multiple ways, providing sufficient time for customers to dispute action if they so choose. Specifically she recommended that there should be notification in the customer's electric bill two consecutive months before trimming; individual mailing one month before trimming; in-person notification by company, or door hanger left if customer is not home, one week before trimming; and upon request, the utility should schedule trimming at a time convenient to both the utility and consumer. Fourth, she advocated that if the utility upgrades its distribution or transmission line to a higher voltage level, and this action results in a change to the affected right-of-way, then the utility should notify affected property owners and have appropriate dispute resolution processes in place for consumers impacted by such changes. She asserted that depending on the situation, this circumstance may require the utility to replace trees that are removed as a result of these actions. Fifth, Ms. Armstrong noted that active public outreach is critical in preventing consumers from planting trees within the utility right-of-way. She stated that the Arbor Day Association's "Right Tree, Right Place" provides an example of how utilities can communicate with consumers about tree planting. Sixth, Ms. Armstrong recommended that utilities provide information on an annual basis to the Commission regarding vegetation management.

4. Responsive Testimony. The extensive responsive evidence is summarized as follows:

A. Goodman.[10] Mr. Goodman acknowledged that no one has ever challenged the need of the utilities to trim and remove trees in order to maintain a safe and reliable distribution system. He also agreed that utilities should have the authority to trim or remove trees which may cause damage to utility lines or cause a future outage. Mr. Goodman also testified that the field hearings proved that 90 to 95% of the problems expressed by property owners could have been avoided by an effective notification process and dispute resolutions

[10] Instead of filing responsive testimony on November 20, 2009, Mr. Goodman filed Direct Testimony dated October 20, 2009, which did not specifically respond to the Final Issues List.

process up-front. He raised issues concerning how the work is done and the alleged violation of private property rights. According to Mr. Goodman, tariff provisions regarding tree trimming or removal violate the United States and Indiana constitutions.

Mr. Goodman testified that the real issues that should be addressed in this proceeding include violations of ANSI A300 standards, notification process, effective communications, dispute resolution process, uniform standards, statutory guidelines and legislative authority and easement rights. Mr. Goodman claimed that property damage has been caused by improper and allegedly illegal up-grades of existing lines. He insisted that certain cuts be outlawed as a violation of ANSI A300 standards, including side cuts, "L" shaped cuts, "topping" and "V" cuts, which, according to Mr. Goodman, often caused more than 25% of a tree's crown to be removed. Mr. Goodman also opposed directional pruning, which he argued creates an unsightly condition, devalues a homeowner's property and creates a dangerous condition where an unbalanced tree may fall and damage property or kill or injure people. He further claimed that the practice of locating power line poles next to or near right-of-way limits causes crews to trespass onto private property and cut trees located thereon. He also accused some utilities of avoiding the responsibility of properly and legally obtaining adequate easement rights. He also asserted that utilities are misleading and mistreating their customers.

Mr. Goodman also claimed that he had been misinformed by IPL personnel regarding the need to cut his tree and that they had lied to senior IPL managers. He also claimed that IPL personnel ignored their own policies and had refused to settle with him. Mr. Goodman also presented arguments regarding the Commission's authority over tariffs. At the same time, he acknowledged that case law authorizes the holder of an easement to do what is reasonably necessary to enjoy the easement.

According to Mr. Goodman, the public field hearings and letters to the Commission confirmed that there is a statewide problem which demands uniform vegetation management standards be recommended for legislative action. Mr. Goodman also argued that the field hearing process, including the notice given to property owners and the timing and location of the hearings, was unfair. Mr. Goodman asserted that certain federal rules and regulations were not relevant and applied only to the national grid system and lines over 200 kV.

Mr. Goodman claimed that a need exists for uniform vegetation management standards. He specifically mentioned a need for a uniform process for notifying customers when trimming will occur, with a built-in verifiable dispute resolution process. He also called for uniform line clearances and a panel of outside experts to establish necessary safety clearances for all lines from the lowest kV up to 200 kV. He also suggested an improved education process to continually educate the public of the right tree in the right place and a revised permitting process to prevent trees being planted in the wrong area of new housing developments. He also called for greater consideration to be given to burying a line versus years of tree trimming and maintenance. Mr. Goodman also insisted that the lack of uniform standards (and the utilities' setting of their own rules) has caused confusion because customers do not know what the rules are because they are different in various places.

Mr. Goodman contended that all necessary easement or right-of-way agreements must be in place to provide for access to, and maintenance or protection of, utility equipment infrastructure. According to Mr. Goodman, if a utility has not acquired an easement through purchase and/or consent of the property owner for the Wire Zone, Border Zone, and any additional footage needed to allow adequate trimming beyond the Wire Zone and Border Zone

boundaries, then that utility should be required to purchase a new or additional easement to cover all the footage needed based upon line voltage.[11] He also argued that private property owners must not be required to sacrifice trees or have restrictions put on their free use of their property, for the convenience of, or cost savings to a utility. Mr. Goodman emphasized the need for compensation for damage, losses and diminished property values. He also advocated the use of eminent domain when the parties cannot agree on a negotiated process and price, as well as the payment of the appraised value of what is damaged or removed, plus additional compensation for restrictions of use of that property. This would cover payment for not planting trees that would eventually encroach on overhead lines. Finally, Mr. Goodman also took the position that it is an abuse of monopoly power when a utility uses prescriptive easements to acquire the rights to trim trees on private property. According to Mr. Goodman, allowing a utility to gain a prescriptive easement without notice to property owners of their rights, negotiation and fair compensation is an abuse of the utility's power and unfair to customers and property owners.

B. Respondent Utilities.

1. Duke Energy Indiana. Mr. Williams testified Duke Energy Indiana follows nationally recognized standards when trimming trees for line clearance procedures, which includes the ANSI A300 standards. With regard to Ms. Armstrong's suggestion that utility distribution line clearances be standardized, Mr. Williams testified a "one-size-fits-all" approach is not appropriate. He explained many factors must be taken into consideration when tree trimming is being performed as part of power line maintenance, such as species, maturity of the tree, location in relation to conductors, line voltage, growth rate and failure characteristics, movement of vegetation, and sagging of conductors during routine wind and icing conditions. Also he noted that trimming is impacted by the different types of service territories and topographies among Indiana utilities. He stated the diverse service territories among Indiana utilities would make it difficult to standardize clearance distances.

Mr. Williams agreed there should be reasonable notice to property owners, but the extensive notice Ms. Armstrong has suggested would be onerous and unnecessarily costly. He noted Duke Energy Indiana has service areas covering 69 counties in north central, central and southern Indiana, and supplies electric service to approximately 775,000 customers over approximately 16,000 miles of distribution lines and an approximate 7,500 mile transmission system. Thus, he explained to require the Company to send individual mailings would require the Company to isolate those affected customers each time any type of vegetation management work is scheduled and in so large a service area, this alone would be a time consuming and costly venture. He also testified a two-month bill notification is also not practical because tree trimming schedules can change due to circuit maintenance priority, budgets, storms, and personnel demands for other areas on the Company's system.

He also explained that it would not be feasible or practical to require the Company to schedule a mutually convenient time with customers to trim their trees. He explained that because non-emergency vegetation management is performed on a regular basis by electric circuit, customer specific scheduling would delay trimming, require additional record keeping, and could require multiple returns to the same location, over all increasing line maintenance costs.

Mr. Williams stated Duke Energy Indiana currently delivers door hanger notification

[11] Mr. Goodman refers to the entire area surrounding the electric conductors as the Wire Zone/Border Zone.

cards approximately two weeks prior to trimming trees. In addition, crew members are instructed to knock on customers' doors prior to beginning work. Thus, he stated the Company's current notice practice is adequate and is the industry accepted method of providing notice to customers.

In response to Ms. Armstrong's recommendation of enhanced customer notice if upgrading a distribution line to a higher voltage level would increase trimming clearance distances, Mr. Williams testified that in such rare line upgrade instances, additional easement rights would likely be acquired to upgrade, operate and maintain the lines at a higher voltage. Thus, the customer would receive notice as part of the easement process so additional notification requirements would not be necessary.

Mr. Williams testified that Duke Energy Indiana agrees that utilities should use reasonable means to educate the public and that Duke Energy Indiana already has a broad public education program. For instance, Duke Energy Indiana provides information to the public regarding right-of-way management and selecting trees for distribution right-of-ways in the Public Safety Section of the Duke Energy Indiana website. In addition, Company personnel have worked with various groups and organizations across the State of Indiana to promote good vegetation management practices, provide financial support for public education programs and conferences, promote "Right Tree Right Place", work collaboratively on research projects, provide support as board members, and work collaboratively on tree plantings.

Regarding Ms. Armstrong's suggestion of a standardized dispute resolution process, Mr. Williams testified that Ms. Armstrong did not define what she means by a "standardized dispute resolution process," nor did she justify the need for a dispute resolution process for "appealing a utility's vegetation management practice" when the vegetation management practice follows the NESC and ANSI A300 standards as she recommends. He reiterated that Duke Energy Indiana has a process in place to address problems that arise with property owners. He stated in addition, a customer may contact the Company at any time with complaints or concerns. A property owner would also have whatever right to recourse is available to them under Indiana law. He pointed out that from 2005 to 2009, the Company has averaged approximately three IURC vegetation management complaints a year, very few given the large size of Duke Energy Indiana's service territory. He opined this demonstrates that the Company's current process is adequately handling any disputes that may arise, and a standardized process is unnecessary.

Finally, Mr. Williams testified that an annual reporting process is unnecessary and would place an undue burden on the utility.

2. I&M. Mr. Isaacson opined that Ms. Armstrong's recommendations are well intended, but have the potential to dramatically increase costs related to the Company's vegetation management practices. He pointed out that I&M's vegetation management practices are in accordance with the requirements of NESC, ANSI, and the general standards of arborists. He also stated that broad-sweeping Commission regulations that lock-in practices at a point in time would increase costs and penalize companies who have an excellent work record with respect to its vegetation management program resulting in few customer complaints. He testified that this speaks to I&M's ability to coordinate and perform tree trimming work on their distribution and transmission system in an efficient and successful manner, keeping customers informed as work is planned.

Mr. Isaacson testified about the low number of complaints filed against I&M in relation

to its tree trimming practices. He testified that this speaks to I&M's ability to coordinate and perform tree trimming work on their distribution and transmission system in an efficient and successful manner, keeping customers informed as work is planned. Mr. Isaacson also noted I&M's long-standing practice of debris removal in maintained or landscaped areas while performing planned maintenance. He testified that I&M leaves limbs to decompose naturally in non-maintained areas, unless the property owner requests removal. He also pointed out that during major storms or other Acts of God, tree trimming crews do not remove debris from the property before moving to the next restoration location. He stated that under these circumstances, the safety of the contractors as well as the importance of timely service restoration for its customers is of primary importance to I&M.

Mr. Isaacson testified that Ms. Armstrong's notice recommendations are unduly burdensome, costly, and unnecessary. He pointed out that I&M already provides an individual mailing to its customers two to three months prior to planned tree trimming work and that the mailer is followed by a work planner who attempts to contact every property owner affected by the planned tree trimming work. The work planner explains the work to be done and answers any questions raised by the property owner. If the work planner is unable to personally contact the property owner, a door hanger notice is left with contact information in case there are any questions. [12]

Mr. Isaacson took issue with Ms. Armstrong's recommendation concerning the provision of a four-hour window. He pointed out that I&M's tree trimming contractors work with property owners to accommodate special requests, but requiring this to happen within a four-hour window is unreasonable and unnecessary. He stated that tree trimming work is not as routine as scheduling an appointment with the local cable company. He emphasized safety as the most important part of any job and to rush this type of work in order to meet a four-hour window could result in an injury or even a fatality. He also pointed out how costly it could be to meet this requirement because I&M performs the majority of its tree trimming work based upon a unit cost per unit of work (i.e., tree trimmed, tree removed). He testified that changing work methods generally runs 30 percent higher than comparable work on a unit cost basis, due primarily to the additional time taken to perform the assignment.

Mr. Isaacson responded to Ms. Armstrong's recommendation regarding distribution and transmission line upgrades and notification by pointing out that I&M is required to provide and maintain adequate NESC clearances and currently notifies customers when an upgrade is planned. He also reiterated that in all cases, a reasonable attempt is made to notify the affected property owners prior to the work being completed and contact information is provided.

Mr. Isaacson highlighted I&M's work with landscapers, nurseries and property developers in an effort to educate them on the appropriate tree species to plant near electric lines. He also pointed out that I&M provides information on its website for all customers to review, including a resource titled "Planting the right tree in the right place" that guides the customer through the process of choosing the appropriate tree for the desired location.

Mr. Isaacson testified that it is not clear what benefit would be gained by filing an annual report as recommended by Ms. Armstrong when judged against the cost.

[12] The record reflects that this is generally how the work planner functions for other Respondents.

3. IMEA. Mr. Tuttle testified that applying "uniform vegetation management standards" to municipal electric utilities is unnecessary because municipal electric utilities have direct, personal contract with their customers related to trimming trees and their policies are regulated by local ordinances and overseen by local governments. Mr. Tuttle disagreed with the OUCC's recommendation that removal of a tree and replacement with a more appropriate planting should be considered where application of an ANSI A300 standard may result in "extreme or excessive pruning." Mr. Tuttle testified that trees trimmed in accordance with the ANSI A300 standards do not result in "extreme or excessive pruning" because those standards are designed to protect the overall health of the tree. Mr. Tuttle also testified that purchasing replacements trees in every instance where a property owner subjectively believed that pruning was "extreme or excessive" would be costly. These incremental costs could be significant for smaller utilities and the expense of replacement plantings would be borne by all customers.

Mr. Tuttle did not agree that the Commission needs to create a generally applicable rule defining "reasonable and proper notice" because utilities already use at least some of the "proper and reasonable notice" techniques described by Ms. Armstrong. Mr. Tuttle expressed his concern that the OUCC's recommended notice would impose additional costs that are unnecessary if the utility is able to make personal contact with customers. Mr. Tuttle also does not believe the Commission needs to establish a rule requiring municipal electric utilities to provide notice to customers before upgrading a transmission or distribution line to a higher voltage level, given the infrequency of such upgrades within municipalities.

Mr. Tuttle testified that a few larger jurisdictional municipal electric utilities currently make outreach efforts to their customers, nurseries, and property developers as proposed by the OUCC, but that a number of the smaller jurisdictional municipal electric utilities do not have the resources to make such extensive outreach efforts. He expressed concern that a one-size-fits-all rule regarding outreach would be cumbersome for smaller jurisdictional municipal electric utilities. Mr. Tuttle was similarly concerned with the OUCC's proposed annual reporting requirement. Mr. Tuttle testified that implementing this recommendation would not only be unnecessary, but burdensome and costly for smaller jurisdictional municipal electric utilities because they generally do not have additional personnel that can be dedicated to tracking and reporting such information on an annual basis.

Mr. Tuttle stated that there already is an appropriate dispute resolution process for consumers to appeal a jurisdictional municipal electric utility's vegetation management practices. Most municipal electric utilities attempt to resolve disputes personally and promptly because of their relatively small size and connection to the community. He testified that most have a policy of addressing complaints before the tree trimming work begins, and, if an issue arises while trimming is being performed, the utility (or its contractors) typically stop work immediately until the issue is resolved. Moreover, Mr. Tuttle testified that municipal electric utilities are overseen by the municipal government, and, to the extent a property owner disagrees with a municipal electric utility's decision relating to tree trimming, the property owner can address his or her concerns to the Mayor, municipal legislative body, or the utility service board. He explained that customers also could request that the City or Town council adopt an ordinance containing tree trimming standards tailored to address any customer concerns.

4. Indiana Statewide, Jurisdictional REMCs and Wabash Valley. Mr. Kiess testified that uniform standards for vegetation management could create a hardship and significant expense to rural electric cooperatives. He also testified that any standards developed

by the Commission should recognize the difference between transmission and distribution management requirements. Mr. Kiess testified that for some rural electric cooperatives, vegetation management costs are among their most significant annual expenses. With respect to debris removal, Mr. Kiess testified that apart from emergency situations, the electric cooperatives generally removed debris in a timely manner, but that any rule regarding debris removal must make exceptions for emergencies and for customers who request the debris be left in place. Mr. Kiess testified that multiple methods of notice to customers in advance of tree trimming would impose an unnecessary layer of cost for member-owned rural electric cooperatives. Mr. Kiess testified that rural electric cooperatives received very few negative comments from the field hearings and he suspects this is because the rural electric cooperatives attempt to have face-to-face contact with their members prior to vegetation management activities, which makes mailing a letter unnecessary. Mr. Kiess also testified that any rule relating to notice should include an exception for emergency outage conditions. With respect to Ms. Armstrong's suggestion that a utility must provide notice if the utility upgrades service, Mr. Kiess testified that if the utility has a private easement further notice to the customer should not be necessary. With respect to a general requirement for a more public outreach, Mr. Kiess cautioned that additional public outreach and education will increase the cooperative's cost of service. With respect to dispute resolution processes, Mr. Kiess testified that the Commission should not insert a dispute resolution process into the cooperative's democratic organizational system.

Mr. Kiess testified that portions of Ms. Armstrong's testimony were not supported by facts or research, and that Ms. Armstrong does not have any identifiable expertise regarding the appropriateness of a "proper" vegetation management program. Mr. Kiess also disagreed with Ms. Armstrong's conclusion that vegetation management standards are not being applied correctly by Indiana utilities, as he found little evidence to support that claim. Finally, Mr. Kiess testified that utilities already supply the Commission with annual reports and adding additional reporting requirements simply increases the cost of doing business, and that there is no demonstration by the OUCC that additional reporting would benefit ratepayers.

5. IPL. IPL presented testimony of Witnesses Thomas F. Walker, Robert L. Tate, Miguel Duarte, Ken Flora, Stephen R. Cieslewicz and Barry J. Bentley.

(a) Mr. Walker. Mr. Walker testified that IPL currently follows the ANSI A300, the practices set forth in the Shigo Guide and the ISA Best Management Practices, as well as compliance with NESC and OSHA safety and line clearing requirements. Given that these industry practices are already in place, Mr. Walker questioned the need to adopt these requirements. He also suggested that if the Commission considers it necessary to impose uniform standards on all Indiana electric utilities, any new rule should encompass the above referenced standards. Mr. Walker questioned the suggestion that the ANSI A300 standards might be adopted only in part or modified by the Commission. Mr. Walker explained that because the ANSI A300 standards were developed by interested stakeholders, including tree care experts, he testified that it seems unnecessary for the Commission to adopt them only in part or otherwise attempt to modify these standards. One of the principal virtues of a standard is that it is standard. Mr. Walker agreed that there are some instances where a tree should be removed. He explained that industry standards, as well as IPL's utility vegetation management plan (which includes Project Cooperation), provide guidance on decisions about tree removal versus pruning, which IPL follows. Mr. Walker testified that IPL's dispute resolution process includes a discretionary tree removal and compatible tree replacement option for customers who agree not

to re-plant a tree that will encroach into the lines at a future date.

Mr. Walker also explained that the costs of a vegetation management program, including any removal or replacement option, will impact the rates customers pay for electric utility service. IPL's vegetation management budget is one of the largest costs associated with maintaining its transmission and distribution system. If new rules are imposed, the costs of vegetation management may increase significantly. He also testified that given the wide range of issues, it would be difficult to establish mandates that will encompass all situations while permitting the utilities to continue to engage in efficient vegetation management.

Mr. Walker testified that IPL's practice regarding debris removal is consistent with OUCC's position as IPL endeavors to remove debris resulting from routine vegetation management within 48 hours after the tree pruning is completed and not to be left behind over a weekend or holiday. He also explained that because the OUCC's recommendation focuses on timely removal (without strict time frames), it recognizes that any new rule should be sufficiently flexible to accommodate a variety of circumstances and operating conditions. He explained that a mandate that restrains a utility's operations to require the debris to be removed within less than one week under all circumstances would unreasonably increase the cost of vegetation management. For example, if a storm event occurred, power restoration efforts and associated vegetation management should take priority over strict compliance with any mandate regarding the removal of routine vegetation management debris. He also explained that local quarantines, such as the Emerald Ash Borer quarantine currently in effect in IPL's service area, can impact debris removal.

Mr. Walker explained that OUCC Witness Armstrong's recommendation should not be expanded to require utilities to remove debris resulting from storms (or other weather conditions) and vegetation management undertaken as part of storm restoration efforts. He stated that when a storm or other weather conditions cause tree damage, that tree damage is the result of an Act of God and the property owner is responsible for pruning away and removing the damaged trees. When that tree damage also causes a power interruption or outage, the tree pruning or removal that IPL does is done so that power may be restored in a timely manner. In this situation, utilities generally do not remove tree debris created by power restoration practice. IPL follows this general practice.

In addressing OUCC Witness Armstrong's recommendation of specific customer notification requirements, Mr. Walker observed that Ms. Armstrong had noted that most of the proposed guidelines are already included in IPL's "Project Cooperation" and are used by IPL for routine vegetation management work. He also explained that IPL's multiple notification process is intended in part to encourage customers to contact the utility well in advance of tree pruning to discuss the work so as to avoid unpleasant confrontations when the line clearing workers arrive. He explained that while not expressly stated in Project Cooperation, when a customer wants to be present during pruning on the customer's property, it is IPL's practice to work with the customer to schedule a mutually agreeable appointment during the period the pruning is scheduled to take place. As a practical matter, the customer should contact IPL at least 14 days in advance to permit scheduling to be accomplished. He also explained that IPL's current experience is that very few customers complain about vegetation management and even fewer request the opportunity to be present when the pruning occurs. He cautioned that if new mandates were adopted that caused a significant increase in this type of request, costs would increase and the overall vegetation management process could be slowed or inefficiencies could result, particularly if tree crews had to stop work on a regular basis in order to wait for the next

appointment window to arrive. He also explained that weather and other conditions can impact or cause tree trimming activities to be delayed. When this happens planned activities need to be rescheduled. This is another example of how scheduling can be difficult and costly, particularly if IPL were required to schedule and possibly reschedule a significant number of very specific appointments on an ongoing basis.

Mr. Walker explained that IPL has the ability to verify all aspects of its Notification Process. He also testified that following the field hearing, he verified that the notifications were being issued in accordance with IPL policy. Mr. Walker also explained that every customer who leaves a message with IPL's Line Clearing Office receives a return call. This ensures that every customer will have the opportunity to talk to a human being about any concerns or complaints rather than an automated answering system.

Mr. Walker disagreed in part with OUCC Witness Armstrong's suggestion that a utility should have appropriate dispute resolution processes in place, particularly for consumers impacted by upgrades in distribution or transmission lines to a higher voltage level. He explained that because this rarely happens and that such facilities are placed either in the public ROW or transmission easements and are governed by ROW regulations or the terms of the easement. Hence, no additional process is necessary. He explained that because IPL uses both an informal and formal dispute resolution process, it does not object to maintaining a dispute resolution process. He also explained that the dispute resolution process must be balanced with cost considerations and that there is no one-size-fits-all resolution when it comes to utility vegetation management concerns. Mr. Walker also explained that because IPL's vegetation management is done on a site specific basis, complaints should be considered in light of the surrounding circumstances.

He also explained that when a property owner plants or maintains trees in a location that interferes with electric conductors, it jeopardizes both service reliability and the safety of the public and IPL's employees. If a single property owner could deny the utility permission to prune the vegetation, that owner could disrupt the preventive or emergency maintenance that is required in order to address encroaching vegetation or restore service. This could result in a service interruption of neighboring customers, many of whom did not object to the vegetation management or did not plant or maintain trees near power lines. He concluded that a regulatory framework that permits a utility access to property in order to effect necessary repairs and maintenance of its conductors, which includes pruning trees away from the lines, prevents private self-interests from harming the obvious public purpose of ensuring safe, reliable service to the service area as a whole.

Mr. Walker agreed that consumer education is important. He explained that IPL engages in customer outreach and education activities designed to educate the public about proper pruning and tree planting near electric utility facilities. He cautioned that cost issues should be taken into consideration before any mandates are imposed.

Mr. Walker explained that consistent with Project Cooperation requirements, IPL does not remove trees from private property without permission from the owner of the property unless the tree is a hazard tree or the Company has documented rights to manage vegetation, as in the case of certain transmission right-of-ways.

He explained that the vast majority of IPL's customers do not contact IPL about vegetation management. He testified that IPL's vegetation management is performed under his

direction and other full time IPL employees who are certified arborists and/or foresters and that IPL gives advance notice so that customers with questions or concerns may contact IPL before the pruning crews arrive. He explained that on the day of pruning, all work will be stopped if a customer has concerns and a contractor foreman will try to resolve the issues. If the customer's concerns are not resolved, all work is halted and the matter is passed to and handled by an IPL representative, such as himself. Mr. Walker testified that his inspection of locations identified during the Indianapolis field hearing did not reveal any trees on those properties that are dead or dying as a result of the tree pruning. He also explained that ANSI A300 standards are used to safeguard the health of the trees that are pruned. In the event a tree is not pruned in accordance with ANSI A300, such incidents may be pursued through IPL or Wright Tree Service.

Mr. Walker also offered general, as well as specific responses, to comments made by customers during the Indianapolis field hearing. He explained that although IPL serves approximately 470,000 retail customers and prunes trees on a large number of properties each year, only twenty-eight (28) individuals spoke during the Indianapolis field hearing, some of whom provided general comments not directed to a specific incident. He also explained that many of the comments made at the field hearing focused on the Traders Point and Meridian-Kessler areas, which have significant and mature tree canopies. He further explained that a significant number of the trees in these areas (and other parts of IPL's service area) are rapid growing species and hazard trees, which tend to be unsafe and prone to failure. It is very likely that such trees will cause an outage in severe weather conditions. He also explained that the majority of events discussed at the field hearing occurred years ago – sometimes even before IPL implemented Project Cooperation. Additionally, many customers discussed incidents involving vegetation management in the public right-of-way. Pruning in the public right-of-way at the properties identified during the field hearing was performed in accordance with IPL's City of Indianapolis Flora Permit. Often City personnel specifically directed these pruning activities. He also explained that based on their comments, it appears that some of the property owners who spoke at the Indianapolis field hearing favor discredited pruning techniques or no pruning at all. He explained that such approach fails to acknowledge recent studies and experience of professional arborists establishing that directional pruning is better for the trees, which stay healthier than those that are trimmed using discredited methods such as the round-over technique.

Mr. Walker also responded to claims that that IPL's employees were difficult to deal with. He explained that most of the individuals who made these comments were addressing incidents that are years old and these customers have previously made these remarks in other forums. He testified that since then, IPL has re-doubled its efforts to communicate well with customers. Furthermore, some of the individuals mentioned during the Indianapolis field hearing are no longer with the Company or are no longer responsible for IPL's communications with customer about vegetation management. Mr. Walker also testified that even though the remarks came from only a few customers, the arguments about customer interaction did not fall on deaf ears. Following the field hearing, additional training was done with both IPL and Wright Tree Service employees to emphasize the need for all employees to work in a professional and respectful manner.

(b) Mr. Bentley. Barry J. Bentley, Vice President, Power Delivery, responded to various issues from the perspective of a Company Officer on the Power Delivery side of the business. Mr. Bentley explained that while uniformity has a simplistic appeal and at first glance may seem like a good idea as perhaps likely to result in fewer disputes,

he cautioned against state-imposed standards that are overly rigid, increase costs significantly, or fail to recognize relevant differences in service areas and vegetation management needs. He also noted that the OUCC supports the procedures and protocols for customer notification established via IPL's Project Cooperation. Although the requirement that IPL adhere to the terms of Project Cooperation expired in April 2004, IPL continues to believe that Project Cooperation, with one possible exception, provides a reasonable framework for the conduct of IPL's vegetation management and that Commission mandates are not necessary.

He explained that absent burying the existing lines, which would be monstrously expensive and is simply impractical, IPL must clear trees from its overhead lines in order to provide the reliable service that is its charge. Mr. Bentley testified that the rationale on whether facilities are buried is largely focused on the construction of new residential housing divisions where new construction can leverage all utilities that share a common underground infrastructure. In addition, the cost to bury underground facilities during new "Greenfield" construction is much less when combined with the synergies of all the utilities. Another consideration for the utilities to bury underground primary and secondary facilities is when the customer agrees to pay the incremental cost between underground and overhead construction. He added that even though buried lines would be better protected from storm events, that does not mean it makes sense to bury all lines as a means to prevent power outages, much less as a means to avoid the need to trim or remove vegetation around power facilities. He also explained that putting electric lines underground is costly. The cost differential for burying high voltage 345,000 volt lines underground is roughly 10 times the cost of overhead construction. Burying urban 138,000 volt transmission lines, 34,500 volt sub-transmission lines and distribution mainline is approximately 5-7 times the cost of overhead facilities. He also testified that even if IPL were to exclude the rural 345,000 volt transmission facilities, it would cost in the magnitude of $10-20 billion dollars to bury IPL's existing 138,000, 34,500, 13,200 and 4,160 volt lines. This would represent a $20,000 to $40,000 cost to each of IPL's roughly 470,000 customers. Mr. Bentley also testified that any attempt to bury the existing lines would also be a slow process. Moreover, it would disrupt, if not cause removal of significant amounts of existing trees or vegetation. Mr. Bentley also explained that underground lines also have problems. Underground lines are susceptible to flood and other water damage. He stated that locating problems with underground facilities can be difficult, time consuming and costly to diagnose and repair.

Mr. Bentley explained that the NERC requirements require utilities to prepare UVM plans, use workers qualified and trained in transmission UVM, have plans to address and resolve mitigating obstacles, track and report tree related outages to the appropriate regional reliability organization, and comply with mandatory clearance requirements for transmission lines. Utilities that do not comply with the NERC requirements may face significant fines. Mr. Bentley acknowledged that the Uniform Utility Vegetation Management Standards FAC-003-1 for the purpose of *enforcement* is confined by lines primarily over 200 kV and lower voltage lines that have been deemed critical. He testified that IPL does not have any transmission lines below 200 kV that would be subject to enforcement per the FAC-003-1 Standard. He also testified that he was not aware of any Indiana or Reliability First transmission utilities with critical transmission under 200 kV that would be subject to enforcement per the FAC-003-1 Standard. Mr. Bentley explained that the bulk electric system is defined as all transmission 100 kV and above, and other critical transmission below 100 kV. Thus, for the operation of the bulk electric system, all of IPL's 138 kV transmission lines have been determined to be part of the bulk electric system lines as determined by FERC. He stated that IPL is required to report all

tree related outages for any of its bulk electric transmission facilities. He explained that Reliability First Corporation ("RFC") and NERC have the ability to investigate any 138 kV transmission outages caused by trees or any other event as they deem necessary.

Mr. Bentley also testified that if IPL's tariff provisions were revoked or new conditions imposed on the exercise of this tariff authority, IPL's ability to provide reliable service will be impaired and operating costs could increase significantly. He explained that this increased cost will ultimately be borne by customers through the ratemaking process. Conversely, a consistent vegetation maintenance program where lines are cleared of trees at regularly scheduled intervals helps to increase service reliability, while reducing routine maintenance and service restoration costs, and the amount of time spent on hot-spotting and responding to customer requests for unscheduled maintenance.

Mr. Bentley also disputed Mr. Goodman's contention that the discretion provided IPL in Section 15.2 of the tariff is unreasonable. He explained that a big picture review of the matter reveals that, although there are a small number of controversies from time to time and place to place, the current historical arrangement has worked well for several decades, resulting in reliable service overall. He also explained that IPL has no motive to exercise that judgment cruelly and, if it acts unreasonably, customers may pursue the matter with the Commission, IPL or other forums. He also testified that IPL is the most informed and expert entity about the hazards of electricity and threats of trees to reliable and safe service, as well as current expert thinking on the topic of best practices in utility line clearing.

(c) Dr. Tate. Robert L. Tate, PhD, is the principal of Robert L. Tate Associates, Inc., Consultants to Urban and Utility Arboriculture. Dr. Tate testified that he was tasked (1) to review the tree pruning and removal work done by IPL via a contract with Wright Tree Service, Inc. and give opinions as to the tree work meeting current industry standards, recommendations and practices set forth in the ANSI A300 (Part 1) Pruning; ISA Best Management Practices, and the Shigo Guide; (2) to provide testimony if the current directional pruning method set forth in the above referenced materials would render the pruned trees and/or parts of them more likely to fail and fall away from the power lines (conductors) onto structures; (3) to give an opinion if the trees pruned directionally by IPL were "butchered"; and (4) to give an opinion if the trees were pruned excessively at the locations identified at the Indianapolis Field Hearing held on September 2, 2009.

Dr. Tate testified that his opinions were formed on the evidence he collected while sampling contractor-pruned trees; comparing them to the above referenced standards, recommendations and practices; interviewing contract tree pruning employees and IPL utility arborists and his overall experience of tree pruning in the utility industry. Dr. Tate testified that the trees have not been "butchered". He testified that the trees pruned and/or removed in the locations identified at the Indianapolis Field Hearing that he visited met and did not exceed the standards, recommendations and practices set forth in the above referenced publications. He explained that the pruning was similar to the work done in other areas of IPL's service area he visited and was concordant with line voltage, tree species, location of tree in relation to the conductors and line priority.

Dr. Tate stated explained that directional pruning is the best choice for the ongoing health of the tree and for the electrical utility industry. Directionally pruned trees adhere to current arboricultural standards, recommendations and practices. He also stated that some lay people don't like it or agree with it in any situation and probably never will even though the

arboricultural literature has proven its merits and the arboricultural profession has adopted it. Dr. Tate also testified that he saw no evidence that directionally pruned trees and/or their limbs are failing and falling away from the conductors. He explained that this opinion was further strengthened after reviewing appropriate arboricultural literature, and finding no published information stating that trees pruned directionally during the last 25 years have failed and fallen away from the conductors unless there were pre-existing structural deficiencies in these pruned trees. He also explained that his opinion about the quality and adherence of IPL's pruning program conforming to accepted utility arboricultural standards was additionally strengthened by the fact that he has examined the pruning component of many utility vegetation management programs in the past as a consultant and as an employee of the Asplundh Tree Expert Co. He concluded that IPL's vegetation management program, when compared to other utility vegetation management programs he has seen, is near or at the top of the list.

Dr. Tate testified that the trees in the service area of IPL must be pruned and maintained. He also explained that nationwide, trees are responsible for approximately 50 percent of all unplanned outages and are the single most cause of electrical interruptions. He explained that the need for utility pruning nationwide is generally in response to the wrong trees planted in the wrong places and that IPL has inherited its share of utility-inappropriate trees and associated vegetation located under or near its service area infrastructure and has no choice but to manage them. He also testified that ignoring or deferring maintenance is not a valid choice for safe, reliable and economic electric service.

(d) Mr. Cieslewicz. Stephen R. Cieslewicz, President and Chief Consultant of CN Utility Consulting, Inc. ("CNUC") clarified the repercussions of not performing UVM in a consistent and timely manner. He explained that when trees encroach near power lines there is a much higher likelihood that there will be power outages, fires and threats to public and employee safety. He also explained that if tree work is not completed in a routine and timely manner, the ultimate costs associated with this work will increase significantly. He stated that this is an important point in that UVM programs are typically one of the largest maintenance expenses at utility companies. Mr. Cieslewicz explained that for transmission lines, UVM work is mandated by FERC's FAC-003. He also explained that this relatively new federal requirement compels utility companies to maintain specific clearances between transmission power lines and any vegetation. Failure to comply with these clearance requirements can result in fines of $1 million per day, per violation.

He explained that while this varies by state, the most common regulation for compelling UVM work on distribution lines is found in the NESC Rule 218. This rule states that "vegetation that may damage ungrounded supply conductors should be pruned or removed." He also explained that NESC does not set or impose specific requirements on how UVM should be performed. Such detail however is set forth in the industry pruning standards: ANSI A300; ISA Best Management Practices, and the Shigo Guide. Mr. Cieslewicz explained that NESC Rule 218 must be general given the complexity and site specific nature of UVM work. Based on his involvement with crafting numerous state and national standards and requirements, he testified that it is next to impossible to fully articulate one standard that would fully describe what should be done at every location. He also explained that is accepted within the industry that ANSI A300 is the appropriate standard for informing how to perform UVM work, whether on transmission or distribution lines. He clarified that this standard, along with supporting best management practices developed and published by the ISA, define the correct way of performing UVM work. He also testified that he was not aware of any state in which ANSI is not used as the standard of

care and guideline for proper UVM work.

Mr. Cieslewicz also explained that state imposed UVM requirements can result in significant cost increases. He testified that when California adopted Rule 35, his budget at PG&E went from approximately $40 million a year to over $110 million a year. He further testified that other utilities in the state, such as SCE and SDG&E, also tripled their UVM budgets to comply with the new requirements. He explained that other considerations include the impact that any new requirement will have on the ability to quickly and efficiently respond to required work, the availability of human resources to perform the work to a new specification, and the impact on existing customers who are satisfied with current practices. He also recommended that if any new regulations are considered by the Commission, there should be a thorough vetting of the implications.

Mr. Cieslewicz testified that ANSI A300 is currently the most appropriate standard for defining "how" to do UVM work. As for regulations that "compel" this work, he stated that NESC is currently the most widely adopted standard for application to distribution lines (as is the case in Indiana). He explained that there are other states, such as California, Oregon, Florida, New Jersey and New York, which have much more robust "compelling" requirements, however they were not promulgated to minimize the need for aggressive UVM activities. They were developed to require the utilities to be more aggressive than they have been in the past.

Mr. Cieslewicz also testified that the IPL tariff contains language and is consistent with what he would expect to see, and has seen, in other descriptions and specifications of UVM programs and activities.

He explained that as with many UVM practices and procedures, there are differences between utilities and between geographic areas. However, during routine work on distribution lines, utility companies generally chip and remove the brush, and leave the useable wood on-site for the customer. He also explained that in emergency situations, such as during storms or when trees or branches fail unexpectedly, utility companies most often leave the debris for the tree owner to remove.

Mr. Cieslewicz also explained how utility companies generally notify customers about pending routine UVM work. He testified that in the majority of cases, prior to performing routine pruning work a contractor (or occasionally a utility employee), will knock on the door and seek to notify the customer of pending work, along with seeking to answer any questions they may have. If the customer is not home, they generally leave a door hanger with the notification and details of where to call if there are any questions or concerns. He also explained that if there is no response or follow-up call from the customer, the work is assigned to the crews and it will commence shortly thereafter (notification could range from days to weeks ahead of the crews actually arriving). In cases where tree removal is required, the majority of utility companies require signed removal slips from the customers before the trees are removed. In some cases, such as on transmission right-of-ways, notifications of pruning and/or removal may not happen at all. He also testified that IPL's current notification procedures are much more comprehensive than would be found at the vast majority of utility companies in North America. As he explained, IPL's practices go well beyond those found elsewhere in the industry and afford the customer with at least four opportunities to discuss the extent of the pending work.

Mr. Cieslewicz explained that other states recognize that the utility is simply mitigating a threat to their facilities in order to ensure the safe and necessary delivery of electricity. He stated

that it is someone else's trees that are growing towards the lines (not the other way around). He also explained that given that the tree owners themselves are not qualified to work near energized lines, the utility companies themselves are currently performing the work and the cost is ultimately borne by customers through the rate making process.

Mr. Cieslewicz also agreed that tree trimming complaints appear to make up a relatively small percentage of all utility consumer complaints received by the OUCC over the past three years. He testified that many people do not understand proper pruning, nor can they differentiate between proper and improper pruning. He stated that the objective of science based pruning is to minimize the cuts and make them at a suitable location on the tree. This approach is the least damaging to the health of the tree and minimizes the likelihood of rapid re-growth back towards the conductors. Unfortunately, the frequent result of proper pruning for line clearance is that trees are often left with a shape that looks like a V or L. He testified that this is a fundamental reason why the entire green industry has advocated for only planting suitably sized trees (at maturity) under or adjacent to overhead power lines. Mr. Cieslewicz also testified that "V" or "L" shaped tree do not present an increased threat of falling over or failing.

He also testified that as for the frequency of similar UVM complaints and criticisms (as are being raised in this particular case) in Indiana compared to the rest of the industry, there are no differences. On average, about 3 percent of customers typically attempt to stop the work from being performed for reasons ranging from having a bad experience in the past to the customer wanting some sort of compensation for allowing the utility to prune their trees. Mr. Cieslewicz explained that even with the most robust set of guidelines, standards and regulations, there will always be complaints due to the nature of the activity.

He explained that most utility companies have some sort of tree replacement initiatives; however, they all range dramatically in scope and size. He also explained that there are a myriad of factors, mostly localized, which determine what type of program is in use. Given the diverse amount of influencing factors, he suggested that there is no particular standard program being used today. Some utilities use tree replacement to remove tall, fast growing trees, some utility companies offer coupons and some utilities do little mitigation. He also testified that as with many other UVM program attributes, such as scheduling, prioritizing work, contracting methods and crew makeups, this should be, and is, a localized decision.

Finally, Mr. Cieslewicz testified that there currently exist avenues of relief for the very small percentage of customers who feel they have legitimate complaints regarding UVM activities. All utility companies have specific claims procedures for investigating and resolving specific claims. Further, if that is not satisfactory, all customers have full and appropriate rights to bring legal actions against the utility.

(e) Mr. Flora. Mr. Flora discussed notice of field hearings and explained that the procedure used by the Commission in this Cause is the same as the procedure used in other proceedings where field hearings are conducted and that it satisfied the requirements of Ind. Code § 8-1-1-8. Mr. Flora also identified additional efforts that the OUCC and Commission made to notify the public of their ability to submit comments in this Cause. He explained that prior to any establishment of a notification requirement one should understand the cost implications of the mandated notifications and weigh those costs against the potential benefits. He also observed that because it can be burdensome to modify or update rules once they are formally adopted or promulgated, any new requirements should be sufficiently flexible to permit procedures to be modified to reflect changes in technology and other factors. One way

to accomplish this goal would be to set forth general requirements that notice be given at specified intervals and to avoid prescribing the specific means that the utilities should use to implement any such new rule.

Mr. Flora testified that while the establishment of on-going reporting requirements to periodically communicate details concerning each utility's vegetation management practices might sound like a good idea, the temptation to require utilities to frequently report on the details of an activity performed to achieve the end goal of providing reliable electric service is one that should be resisted. He explained that all reporting, regardless of the topic, requires time and resources to be devoted to this activity at the potential cost of not performing some other activity. He also explained that reporting requirements that address isolated incidents and consume resources of all parties should be avoided. He further noted that the Commission already tracks customer complaints and has an established process for individual consumer complaints. Should an upward trend in the number of vegetation management complaints occur for an individual utility, then the Commission may solicit additional information at that time and take further action, as necessary.

Mr. Flora stated that IPL has the highest overall customer satisfaction rating among investor-owned utilities in the state of Indiana, as reported in the 2009 J.D. Power Customer Satisfaction Survey. He also explained that if there are instances where it is determined that IPL's vegetation management practices are not being followed, the root cause of any such discrepancy will be determined and then remedied. He explained that IPL's process for dispute resolution provides ample opportunity for customers to discuss concerns with IPL's vegetation management practices. These practices include the availability of an IPL employee who will speak with the concerned customer and try to resolve the issues prior to commencing with pruning or tree removal. He concluded that because the cost of any new rules will ultimately be reflected in the rates charged for electric service, the cost associated with any new requirement should be weighed against the ratemaking impact.

Mr. Flora also testified that the tariff language that expressly authorizes IPL to install and maintain its facilities on the customer's property, including the right to trim and remove trees located on the customer's property was placed into effect on December 22, 1976 following the Commission's approval of the Company's Rules and Regulations of Service in Cause No. 34363. He explained that this additional language seems reasonable, if not desirable, because it provides customers with a better understanding of the terms to which they are bound when they take retail electric service. He explained that to the extent individual consumers have a complaint the Commission already has an informal complaint process. Consumers may also utilize the utility's dispute resolution process and/or pursue other legal remedies. The costs and associated ratemaking impact of any proposals made by parties in this Cause should be taken into consideration. He concluded that to the extent that the Commission finds that uniform requirements should be imposed, a formal rulemaking would be appropriate so that any new rules may be properly noticed and published in accordance with the existing rule promulgation process.

(f) Mr. Duarte. Miguel Duarte, an ISA Certified Arborist and General Foreman employed by Wright Tree Service, Inc. described Wright Tree Service's training program which addresses a variety of subjects including, but not limited to, ANSI A300 pruning, tree species identification, customer and property owner communication, tree climbing, equipment operation, safety, traffic control, First Aid and CPR. He explained that it is necessary for Wright Tree Service employees to participate in training and pass tests in order to advance

within the Company. Mr. Duarte responded to comments of IPL customers who, at the September 2, 2009 field hearing in Indianapolis, questioned the English capabilities of Wright Tree Service employees who perform tree trimming or removal. He broadly explained that Wright Tree Service has extensive requirements for all employee levels and trains its employees to communicate effectively with customers and property owners. He also explained that work planners must complete an IPL Company-approved customer relations study course, which enables them to address concerns raised before the tree crew arrives on the job site. He stated that Line Clearance Foremen and General Foremen must demonstrate the ability to communicate, both verbally and in writing, with the general public, customers and fellow employees.

Mr. Duarte also testified Wright Tree Service procedure provides that communications with the property owner should generally be handled by the Foreman or other supervisory personnel. He explained that the Foreman is on the job site and the General Foreman is usually in the area and may be available to the property owner within a few minutes. He also explained that in situations involving conflict, all work is stopped while the Foreman or General Foreman addresses the property owner's concern. If the matter is not resolved, an IPL representative is contacted to follow up with the property owner. He testified that work does not resume until the matter has been addressed. As a result, the crew moves on to work at other locations. Mr. Duarte also testified that the Foreman and General Foreman are most knowledgeable about the pruning activities and are specially trained to communicate with property owners and discuss their concerns. He explained that Wright Tree Service recognizes that good communication with customers, property owners and the public is important and that additional training in this area was conducted as a result of the input received at the field hearing.

Mr. Duarte also disputed the claim that trimming is not done on a species specific basis. He explained that Wright Tree Service employees are trained to prune on a site specific, tree specific basis in accordance with ANSI A300 standards. In order to move up beyond the climber trainee designation, the employee must have basic knowledge of trees, including identification, growth habits, and correct arboricultural techniques for pruning. He also explained that A300 standards are taught in class and field training is conducted using Dr. Shigo's "Pruning Trees near Electric Utility Lines," Wright Tree Service (WTS) Foreman's Manual, and WTS approved work methods. Ten written tests and field tests are used to validate employee's skill and understanding of A300 applications. Furthermore, at least six times per year WTS Safety, Education, and Training (SET) personnel use field and class labs to refresh and reinforce A300 standards with WTS workers.

6. NIPSCO. Mr. Dehring testified that, while it is impossible to completely prevent damage caused by ice storms, proper utility vegetation management practices certainly can mitigate the effects by reducing exposure to tree-related outages resulting from ice storms. Mr. Dehring also testified to the importance of customer notification, but stated that the recommendations made by the OUCC in this area are overly prescriptive. In his view, the value of advance notice lies in the ability of the utility to present information to customers, answer questions, and address concerns well in advance of crews arriving to perform the work. According to Mr. Dehring, the utility should, in most cases, remove debris in a timely manner, but he indicated that there are exceptions, including wood that has value as firewood or debris as a result of storm damage. Mr. Dehring also explained that when new or upgraded lines are planned, utilities typically will seek the approval of the governing highway authority prior to construction of facilities in public right-of-way. Mr. Dehring testified that NIPSCO is

committed to continuously improving communications with all stakeholders in utility vegetation management. He said that NIPSCO also participates in the "Right Tree, Right Place, Right Way" campaign, which encourages individuals planting trees to consider the location and the ultimate size of the tree when making decisions about what and where to plant trees. For the past sixteen consecutive years, NIPSCO has received the "Tree City USA Utility" recognition from the Arbor Day Foundation. One of the requirements of this award is that the utility meet or exceed the ANSI A300 Standards for Tree Care Operations. According to Mr. Dehring, NIPSCO has a "Line Clearance Quality Audit" which is performed by the Work Planner and/or Forestry Supervisor. This audit is designed to assure contractors are following the ANSI A300 standards.

Because each utility has unique characteristics in its service territory, Mr. Dehring testified that standardization is difficult. Because of this, it makes more sense to allow utilities to determine their own clearances and trimming cycles based upon reliability needs, requirements and recommendations from NERC and the NESC. According to him, should the Commission decide it is necessary to incorporate a specific standard into its rules, NIPSCO would, however, support adoption, by reference, of the ANSI A300 standard for vegetation management work. Mr. Dehring noted that all trees, whether located inside or outside of utility right-of-way are trimmed using the practices contained in the ANSI A300 standard. NIPSCO will not remove a tree outside of utility right-of way without consent of the owner.

7. Vectren. In responding to the OUCC's recommendation for uniform vegetation management standards, Mr. Luttrell cautioned that the perceived benefits of new rules need to be balanced against the resulting impact on system reliability and operating cost. He pointed out that standards already exist in ANSI A300 and the Shigo Guide. He cautioned that further standardizing tree trimming practices for all utilities would have to continue to provide utility discretion and flexibility and take into consideration that tree trimming activities vary based on location, terrain, type of tree, condition of the tree, configuration of the tree, location of the most appropriate branch lateral, the property owners expressed attitude toward tree trimming, type of electric facility etc. He testified that under any standards, the utility needs to retain the discretion and flexibility to manage vegetation in a manner most appropriate for each differing location and the differing circumstances they present so as to promote safe and reliable service. Mr. Luttrell was also mindful that additional regulation may have the unintended consequence of adversely affecting system reliability for all customers or worse yet result in injury or death. Mr. Luttrell explained that no issues regarding Vectren South have been identified and at the Evansville field hearing there were many comments very supportive of Vectren South's vegetation management practices. He stated utilities that do not have issues with vegetation management surely do not need new regulations and reporting requirements that may have the unintended consequences of slowing tree trimming and increasing operating costs.

Mr. Luttrell reiterated that Vectren South tree trimming standards are already based on the practices outlined in ANSI A300, the common best management practice in the industry. Regarding the OUCC's suggestion that where application of the ANSI A300 standards may result in "excessive pruning, then removal of the tree and replacement with a more appropriate planting should be considered," Mr. Luttrell testified that by its very nature, pruning conducted in compliance with ANSI A300 is not excessive. But dependent on the proximity to the conductor, the configuration of the tree and the type of tree, substantial or extensive pruning compliant with ANSI A300 may be necessary. Mr. Luttrell added that "considering" tree

replacement must not be construed as the mandatory offering of replacement trees. He explained that based on the size, species, and other criteria, Vectren South already considers tree removal within the easement, public right-of-way or contiguous thereto. The Company seeks agreement with the property owner to remove the tree. Obtaining that agreement does not always necessitate offering a replacement tree. Some property owners are happy to have specific trees removed without any encouragement from the utility. Mr. Luttrell testified utilities should be left with the discretion of how and when to offer property owners replacement trees because if every instance of tree removal requires a replacement tree to satisfy the land owner and if providing replacement trees were to become essentially mandatory every time heavy pruning is required or a tree must be removed, that will only slow the tree trimming process thereby reducing overall system reliability and would increase the cost of vegetation management ultimately born by all customers.

Regarding the OUCC's proposal that utilities "provide proper and reasonable notice to property owners prior to trimming trees, Mr. Luttrell referenced his direct testimony, where he described the combination of personal contact, two door hangers, telephone calls, and notification letters that Vectren South deploys in an effort to give the property owner reasonable notice of upcoming tree trimming. Thus, he stated Vectren South is already compliant with the OUCC's recommendation of providing reasonable notice. He stated that property owners need to be given a fair opportunity to know of the upcoming tree trimming, but yet the provision of notice and the response thereto should not take so much time as to delay or unduly protract the tree trimming effort. Mr. Luttrell testified not all utilities' billing systems may be easily conducive to sending such information to a limited subset of their customer base. He did not believe the proposed monthly bill method of notifying customers of upcoming tree trimming activities would be as effective as other methods. He testified not all customers focus every month on the information provided with bills. He testified the methods Vectren South uses are more effective at notifying customers of upcoming tree trimming than a letter in the billing envelope would be. Mr. Luttrell stated several reasons why it would be difficult to comply with the OUCC suggestion that the utility should be able to give the customer a four hour window of when trimming will occur. He testified tree trimming schedules may be impacted by a number of variables like bad weather, employee illness, equipment failures, an area simply taking more time than expected, or a crew being pulled off an area temporarily to deal with a more urgent tree problem. Customer specific tree trimming appointments could require the crew to make a special visit to that customer's location, increasing the time needed to complete the trimming work in the area and thereby diminishing system reliability and increasing costs. He testified customer requests to trim at a specific time are currently extremely rare and the four hour window proposal is not warranted. He explained it may be plausible on a case by case basis to tell a concerned customer a four hour window the day before expected trimming, but even then, intervening events or conditions could prevent being on time. He testified that Vectren South is willing to work with customers and when timely requested will give its best estimate of when the trimming crew will be on site but cannot always guarantee a four hour window and should not be mandated to do so.

Mr. Luttrell testified replacing existing lines with higher voltage lines is an unusual occurrence. However, in such unusual instance it is reasonable to notify property owners that replacement higher voltage lines will require a wider area of tree trimming.

With regard to customer education, Mr. Luttrell referenced his direct testimony where he stated that Vectren South provides all customers tree related information in bill inserts,

information on its website, and conducts an annual Arbor Day celebration at which materials on proper tree placement and vegetation management are shared. He pointed out that such efforts are already common place in the industry and that a new rule is not necessary to accomplish this goal. He cautioned that if informing customers of "their rights" results in or is intended to encourage customers to not agree to or oppose their electric utility's mandatory efforts to trim or remove vegetation near conductors that would be very counterproductive. He stated education should focus on the need for and benefit of preventing tree contact from power lines, the right tree in the right place, and the need for cooperation between customers and their utility in accomplishing the essential task of tree trimming. He stated that without a new rule, Vectren South already pursues those goals through information provided to customers, customer face to face contact, and Vectren South speakers at venues such as neighborhood association meetings.

Regarding dispute resolution, Mr. Luttrell referred to his direct testimony stating that Vectren South is receptive to customer concerns in person, by telephone, by email, and via the Company's website and that the Company always takes customer concerns seriously and works to promptly address and resolve them. Mr. Luttrell stated his belief that this informal, non legalistic approach has worked well for Vectren South and that a formalized, legalistic alternative dispute resolution mechanism is not necessary. He expressed concern that with an ingrained, formalized, legalistic dispute resolution process, the chances of informal resolution in the field or at the Company level will be decreased. He also stated that the Commission's Consumer Affairs Division addresses customer utility customer complaints. Mr. Luttrell stated if some negotiation is required in order to obtain line clearances or agreement on tree removal necessary to continue the provision of safe and adequate electric service, those negotiations should occur in the field or at the Company office level.

Mr. Luttrell stated the Commission has the cooperation of Indiana's public utilities and if the Commission needs information, it has been his experience that utilities are amenable to providing it. He doubted that the Commission and Indiana electric utilities need to be burdened with an additional annual report on information that may not be necessary or particularly useful. He explained there is not a tree trimming problem to be addressed or monitored in the Vectren South service area and if such problems did exist, it would be more efficient and appropriate to address them or require reporting where they occur rather than impose new statewide requirements. He testified to burden the Commission and all Indiana electric utilities with the cost and distraction of a new annual reporting that is not necessary does not seem warranted.

Mr. Luttrell testified that utility tariffs are reviewed by all interested parties as part of the ratemaking process and only become effective upon ultimate approval by the Commission and that represents a reasonable means of having those rights and obligations reviewed, clearly stated, and approved. He referenced Section 7 of Vectren South's Tariff General Terms and Conditions which allows for Company access to customer premises to repair and inspect facilities and explained such access is needed for multiple reasons, including the repair and maintenance of lines, to ensure safe and reliable service, and it is appropriately provided by the Commission approved tariff. Mr. Luttrell posed that rather than being viewed as deterrence to expressions of customer questions or concerns, the tariffs should be viewed as Commission approved guideposts as to the terms for cooperation by the customer and the utility so safe and adequate service may be reliably provided.

C. OUCC. OUCC witness Armstrong summarized comments received from various consumers regarding their concern that allowing for more growth of vegetation would negatively impact the reliability of their own service and that they would have to pay higher

electric bills if utilities were required to replace trees or significantly change current pruning practices. She also noted that many consumers disagreed with certain practices regarding trimming and the lack of notification. She also mentioned complaints regarding damage and the failure to remove debris.

Ms. Armstrong testified that the proceeding is not the forum for the redress of perceived wrongs committed by utilities and their contractors. However, the proceeding had shown a need for better communication with customers regarding proposed trimming and allowing customers to be present during the activities. She noted that most of the utilities were already implementing these practices as part of their vegetation management programs. She also cited various practices that are beneficial to resolving consumer issues that were noted in the proceeding, including educating consumers regarding the relationship of their landscaping with overhead wires and facilities. She also mentioned tree replacement programs and the temporary suspension of planned trimming if the property owner could not be contacted by phone or mail.

Ms. Armstrong also testified that OUCC expects utilities to remove trimming debris. She also suggested that while the utility should be required to remove tree trimming debris that is created by its crews during storm restoration efforts, it should not be required to remove all storm-related debris.

Ms. Armstrong also testified that OUCC recognizes that a utility must have the ability to access its facilities for maintenance and that it will assert this right in its tariffs. She also noted that the inconsistent nature of easements necessitated the need to be able to rely on tariffs in order to conduct necessary maintenance activities. She also noted that this investigation may not be the proper forum to address any conflicts between tariff language and private property rights.

Ms. Armstrong also testified that while pruning in accordance with ANSI A300 standards does not always produce an aesthetically pleasing result, OUCC, consistent with forestry experts and arborists, believes that it is more important to ensure the health of the trees and maintain the integrity of power lines than it is to preserve the aesthetic qualities of plants. She also testified that OUCC encouraged utilities to educate and collaborate with their customers before pruning was necessary. She also advocated standard clearances and trimming cycles. Finally, Ms. Armstrong noted that OUCC believes that prudently incurred expenses associated with vegetation management are recoverable by the utility through its base rates. She also noted that the utilities should be entitled to seek cost recovery for those incremental prudently incurred expenses.

5. Reply/Rebuttal Testimony.

A. Goodman.

1. Mr. Goodman. Mr. Goodman responded to the testimony offered by Respondents and the OUCC.

Mr. Goodman testified that IPL personnel lied to senior management about following IPL procedures and that management has misled property owners. He also stated that he and other property owners do not believe that IPL follows ANSI A300 standards. He also complained that cutting according to ANSI A300 standards might leave a tree disfigured and unsightly. He testified that the real issue should be what rights a property owner has in how a particular tree should be cut. He disputed IPL witness Walker's testimony regarding notice and claimed that

IPL contractors or employees failed to advise senior personnel of his objections to IPL trimming his tree. He also argued that IPL violated Project Cooperation by limiting self-trim contracts to lower voltage distribution lines.

Mr. Goodman testified that utilities need to identify which trees are located in an easement or right-of-way, as well as those on private property and need to share that information with property owners so that the owner would have a say on how the trees are to be cut and compensated for any damage that may be done to the property or tree. He also alleged that upgrades to a higher voltage most often require an expanded easement and that all easements need to be legally secured before hand and are subject to the eminent domain laws.

Mr. Goodman also challenged Mr. Walker's testimony regarding the verification of notice and accused him of having a vested interest in trying to put a positive face on IPL's program. Mr. Goodman praised IPL for changing its telephone procedures. However, in responding to IPL witness Duarte's comments that work is stopped pending resolution of a customer's complaint, Mr. Goodman disagreed with Mr. Duarte's contention. Mr. Goodman criticized IPL witness Flora for defending the Commission procedures used in this proceeding and claimed that the poor turnout at the field hearings was caused by inadequate notice. Mr. Goodman suggested that IPL should support the OUCC's recommendations regarding dispute resolution and the legislative changes he has proposed and/or Commission changes to mandate what IPL claims to be its current policies. In response to Mr. Flora's testimony that IPL's tariff provisions governing trimming are reasonable and date back to 1976, Mr. Goodman stated that the vast majority of customers were not told that a condition to receive electric service was the loss of their constitutional property rights. Mr. Goodman agreed with Mr. Cieslewicz that UVM must be performed in a consistent and timely manner. However, he asserted that adopting statewide standards would ensure consistent and timely UVM.

Mr. Goodman conceded that Mr. Cieslewicz was correct that UVM work is mandated by FERC's FAC-003 but claimed that such testimony was misleading because FERC's UVM standards and fines apply to all lines at or over 200 kV. Mr. Goodman also criticized Mr. Cieslewicz's comment that the language and concepts in IPL's tariff is consistent with other UVM programs and activities of which he is aware. Mr. Goodman also claimed that Mr. Cieslewicz's view regarding the Wire Zone/Border Zone contradicted his own language from the FERC report produced by his company.

In response to IPL witness Bentley's testimony, Mr. Goodman testified that he was comforted that IPL continues to support the Project Cooperation principles and agrees that disputes should be resolved before hand. However, he noted that in order for a dispute to be settled fairly, it requires a third party, not IPL alone. Mr. Goodman recognized Mr. Bentley's comment that IPL has modified its training, communications and procedures in response to issues raised during the field hearing, but asserted that IPL needs to acknowledge past serious mistakes and that some of its personnel do not have the necessary skills to deal with the public. In response to Mr. Bentley's testimony regarding burying lines, Mr. Goodman stated that various IPL spokespersons have offered different reasons for not burying high voltage lines underground. Mr. Goodman conceded that Mr. Bentley's description of the applicability to IPL of the Uniform Utility Vegetation Management Standards FAC-19 003-110 enforced by FERC was accurate. Nevertheless, he insisted that the state is responsible for all UVM standards and enforcement actions for all lines under 200 kV.

Mr. Goodman also testified that the utilities were continuing to try to shift the focus of

this investigation from what he considers to be the core issues, which he claims should be the property rights of the utilities' customers, a more effective notification system, and an improved customer dispute resolution process. According to Mr. Goodman, the shift is being accomplished by asserting misleading comments regarding FERC UVM standards and by repeating the argument that the pruning measures are needed to provide safe and reliable distribution service. Mr. Goodman also asserted that the "safe and reliable" argument masks the "real" motivation, which is to cut annual operating costs. He suggested that the utilities are asking to extend the cutting frequency to five years instead of three. He contends, however, that moving to a five-year cycle would drastically increase the damage to customers' yards with no real increase in safety and reliability.

While agreeing that the goal of reducing costs to customers is appropriate, Mr. Goodman asserted that the methods and policies used to accomplish the cost cutting goals are not acceptable and often unethical. Mr. Goodman asserted that IPL witness Owens highlights how much UVM property has not been acquired legally. Mr. Goodman also took issue with the videos that Mr. Bentley introduced to demonstrate the extremely dangerous propensities of electricity. Mr. Goodman further responded to Mr. Bentley's discussion of how the IPL tariff serves the public interest by insisting that IPL did not secure easements legally before upgrading lines to 138 kV and by ignoring eminent domain statutes that allegedly might have blocked the upgrading of the Traders Point 138 kV line. Once again, Mr. Goodman asserted that IPL's actions were in conflict with the Indiana Constitution.

Mr. Goodman also criticized Mr. Bentley's explanation that the tariff provisions constitute a legitimate burden by insisting that the cost of doing business should include the acquisition of adequate easements to maintain the "safety and reliability" that all customers want and deserve. According to Mr. Goodman, because it is unfair to burden only property owners who have trees on their property or who might want to plant trees in the future, the utilities must compensate all property owners from whom it needs to "take" property.

Mr. Goodman also addressed directional pruning. According to Mr. Goodman, he is opposed to the current application of directional pruning, which he claims has resulted in complaints and concerns and the taking of personal property. He also asserted that the utilities are not in the best position to exercise judgment regarding the removal of encroaching vegetation and that the utilities have changed their practices in recent years, which has resulted in the need for statewide uniformity of rules and enforcement.

Mr. Goodman also claimed that if the utilities substantially improve their communications with customers prior to any pruning, most problems will go away. Mr. Goodman further asserted that well over 90% of all the complaints could have been avoided by working with the customer. Mr. Goodman proposed that the Commission should rescind IPL's tariff provisions on the grounds it is unreasonable and its revocation would allow the Commission to avoid his asserted constitutional issues.

Mr. Goodman also took issue with the testimony of Duke witness Williams. Mr. Goodman testified that standardizing safety clearances based upon voltage would be a good idea. He also claimed that clearances must be tree specific. He also commented on the "hour window" by asserting that some system should be provided to homeowners in which the exact day of trimming is planned. In response to Duke witness William's testimony regarding a standardized dispute resolution process, Mr. Goodman claimed that if the utilities, like Duke, take a more pro-active approach with customer's education and problems, appeals to a local forester, and then to

the Commission would be extremely rare. In taking this position, Mr. Goodman once again acknowledged that 95% of reported problems could be fixed with a more positive approach with customers.

Mr. Goodman also indicated that it seemed clear to him that NIPSCO is trying to improve its over-all customer relations. He then asserted that all the major investors who own utilities, as well as their customers, would benefit from an improved and standardized notification process. He also suggested that pre-programmed messages at the bottom of a customer's monthly statement based on zip codes would simplify an improved standardized notification process.

In closing, Mr. Goodman lauded OUCC witness Armstrong's work. He also expressed his feeling that a different, more customer friendly atmosphere existed at the smaller rural electric companies and requested the smaller utilities to assist him in fashioning legislation that would recognize differences between larger and smaller utilities while imposing uniform standards statewide.

2. John P. Hawkins. Mr. Hawkins testified on behalf of Mr. Goodman that he disagreed with the quality of the tree work reflected in the photographs. During cross-examination, Mr. Hawkins admitted that he did not take the pictures included with his testimony and did not know where the trees were located. Transcript at M-15. Mr. Hawkins also testified that all utilities should be required to follow ANSI 300 Standards with an Electrical Hazards Awareness Program and certified arborists on site to regulate. Mr. Hawkins also responded critically to "L" shaped cuts and recommended that lines be buried rather than removing larger trees and replacing them with species that would not conflict with lines and facilities. However, he indicated that trees underneath overhead lines (wire zones) should follow ANSI advice. He also testified that he felt that uniform safety clearances should be established by experts to prevent arcing between lines and nearby vegetation. He also agreed with Mr. Goodman that notification of planned trimming and improved education and oversight of tree trimmers would be beneficial. He also suggested that tree boards should be used where concerns could be addressed before any work is done.

B. Respondent Utilities.

1. Duke Energy Indiana. Mr. Stanley stated that Duke Energy Indiana generally agrees with Ms. Armstrong's comments regarding working with customers on tree trimming issues, such as reasonably attempting to accommodate customers who desire to be present when tree trimming is occurring on their property and properly educating customers on tree trimming practices and preventative planting.

Regarding Ms. Armstrong's recommendations that utilities should notify the customers several weeks in advance of trimming, permit the customer to be present, and use informational materials to educate customers on tree trimming issues, Mr. Stanley described how Duke Energy Indiana currently performs these activities. Mr. Stanley explained that during storm-related outages, the primary goal is the timely restoration of electricity. Duke Energy Indiana takes the responsibility to restore power as timely as possible very seriously, at times resulting in significant cost. He stated that to require a utility to return to properties affected by storm damage to remove debris, days later, is both cost prohibitive and disrupts the vegetation management cycle. Mr. Stanley added that it is not the utilities' restoration efforts that causes vegetation debris, but rather the storm event itself and it is impractical for the utility crews to segregate its debris generated to restore service from other storm-related debris, particularly days

or weeks later.

Mr. Stanley testified that although tree aesthetics may be a consideration in tree trimming activities, the Company is mindful that safe and reliable service is its top priority. He stated by following ANSI A300 and the guidelines set forth in the Shigo Guide, the utility hopes to ensure the health of trees and preserve tree aesthetics, while still meeting its obligation to provide reasonably adequate service and facilities to its customers.

In response to Mr. Goodman's concerns, Mr. Stanley generally noted that many of Mr. Goodman's concerns are directed at IPL. Mr. Stanley pointed out that Mr. Goodman made a number of recommendations that Duke Energy Indiana agrees with and has already implemented, such as taking reasonable steps to educate the public by promoting "Right Tree, Right Place;" the need to adhere to ANSI A300; and the value of notification prior to vegetation management activities. Mr. Stanley did not agree with Mr. Goodman's recommendation that utilities should allow customers to trim their own trees when requested. He explained that customers to in effect assume responsibility for power line maintenance and vegetation management presents real safety concerns, places all customers at greater risks of outages, and could compromise the utility's ability to provide reliable electric service. He stated self-initiated tree trimming near energized power lines creates the potential for customers themselves or unqualified workers hired by the customer to cause injury or even death, and to do damage to Duke Energy Indiana facilities. With customer tree trimming, aside from increased costs of doing follow-up visual inspections, the Company has no assurance that the work will be performed in a timely and satisfactory manner or that the contractor will follow ANSI A300 or other industry standards. He stated that tracking which customers have opted to be responsible for trimming and changes in property ownership create their own logistical challenges. For all of these reasons he concluded customers should not be given the option to assume responsibility for tree trimming, this responsibility should remain with the utility.

Mr. Stanley responded he is unaware of any abuses by Duke Energy Indiana causing property damage from improper or illegal upgrades of existing lines in violation of state law. He stated the Company acquires additional easement rights, if needed for line upgrades and adheres to the ANSI A300 standards. Mr. Stanley responded that it is not necessary for the Commission to implement statewide rules. He explained Duke Energy Indiana already follows nationally recognized vegetation management standards. He stated these national standards represent the industry consensus on performing tree trimming based on scientific research and proven methodology, and any further review by "outside experts" seems contrary to the guidelines established by the NESC and ANSI A300 standards and unnecessarily duplicative. He reiterated the need for utilities to have discretion in applying these standards, taking into consideration the unique characteristics of a utility's service territory.

Regarding the customer notification process, Mr. Stanley emphasized a "one-size-fits-all" approach is inappropriate. He testified Mr. Goodman's recommendations are impractical and work an unnecessary hardship, particularly given the fact that Duke Energy Indiana receives a small number of complaints regarding its tree trimming practices. He also testified that Mr. Goodman's recommendations would increase the costs associated with tree trimming, which will ultimately be borne by customers. As an example, while Mr. Goodman recommends that each homeowner get a face to face prior visit to discuss and plan the proposed trimming, Mr. Stanley stated many customers place a premium on their free time and would not welcome a visit to discuss tree trimming; however, the Company provides customers with a telephone number to call in advance of scheduled tree trimming and will meet with any customer who requests a

meeting. He added that a blanket requirement to meet with every customer creates a number of logistical problems and would add increase costs associated with tree trimming.

Mr. Stanley testified that a formalized dispute resolution process is not necessary; it would increase costs and has the potential to delay the vegetation management process, which can have a negative impact on safety and reliability. He explained many "disputes" can be, and are, handled in the field as they arise and in addition to current informal dispute resolution with Duke Energy Indiana, each customer has whatever right to recourse is available to them under Indiana law, including small claims court, if needed to resolve a dispute.

Mr. Stanley responded that obtaining consent from customers is not always legally required if the Company is authorized to enter private property without permission under Indiana common law, statute or regulation, under its tariff, or under any land or contract right. Mr. Stanley explained forcing the utilities to obtain consent, even when not legally required, will delay required vegetation management work, which often must be done quickly to avoid a potential outage. Regarding Mr. Goodman's recommendation that great consideration should be given to burying power lines, Mr. Stanley disagreed and stated that burying existing power lines would result in significant increases in costs to customers. Finally, Mr. Stanley related his understanding that the law regarding easements, rights-of-way and prescriptive easements is already well developed and long-standing in Indiana law and Duke Energy Indiana acquires easements and relies on rights-of-way and prescriptive easements where necessary in its provision of safe and reliable electricity.

2. I&M. Mr. Isaacson reiterated his position that state-wide requirements or regulations will, in general, increase costs for I&M's customers and have the potential to dramatically increase costs related to the Company's vegetation management practices. Mr. Isaacson also responded to Ms. Armstrong's mention of particular practices by various utilities that seem to be beneficial. He stated that some of these practices are fairly common among utilities while others might be adopted by utilities after years of interaction with the individual customers in a particular service territory. He warned that one should not assume that what works for one utility and its customers will automatically work for another. He added that each utility is responsible for the integrity and reliability of its network and should have the ability to adopt programs it feels best achieves its goals.

Mr. Isaacson disagreed with Ms. Armstrong's expectation that utilities remove any debris left on the customer's property as a result of storm restoration efforts. He reiterated his previous testimony highlighting I&M's long-standing practice of removing debris while performing planned tree trimming work, but urged the Commission to keep vegetation management and storm restoration efforts separate and distinct. He pointed out that Ms. Armstrong does not recognize that the primary purpose of a utility in responding to storms should be to ensure the safety of the public and its employees while restoring electric service in a timely manner. He explained that while a storm might knock down a tree 100 feet from a power line and one on a power line, the utility is not expected to remove the tree 100 feet from the line. He testified that the utility takes responsibility for vegetation it trims as part of its normal vegetation duties, but that adding a duty to respond to storm damage restoration situations as if it were a normal step in trimming efforts is unreasonable. He also added that this would be an entirely new program that creates a whole new duty upon utilities and could cause an overwhelming financial burden on I&M and other utilities that would require some type of contemporaneous method for cost recovery.

Mr. Isaacson did not agree that standard clearances should be established for all utilities in Indiana. He pointed out that I&M establishes line clearances based on NESC Rule 218, as well as NERC vegetation standards. He also added that line clearances can depend on site-related factors such as right-of-way agreements with property owners, Department of Transportation restrictions, USDA Forest Service Special Use Permit requirements, multiple lines in a corridor, and type of construction (single pole or steel tower). He also showed that line clearances will depend on the individual utility's trim cycle. Thus, there is not one "standard clearance" applicable to all distribution or transmission lines.

Mr. Isaacson agreed that nothing is more important than the safety of the public and the safety of I&M's workers and contractors in providing a reliable distribution system. Mr. Isaacson could not agree that in every situation certain types of cuts such as topping, V-cuts, side-cuts, and L-shaped cuts should be banned as a violation of the ANSI A300 standards. He pointed out that such a rigid standard would not allow I&M to work with its customers on a case-by-case basis to determine the preference of that property owner. Mr. Isaacson pointed out that Mr. Goodman references NERC reliability standard FAC-003-1 and that it applies to transmission lines over 200 kV, as well as certain lines under 200 kV designated as critical.

Mr. Isaacson addressed Mr. Goodman's assessment of the need for utilities to cooperate with their customers by pointing out the importance of utility tree trimming programs to ensure safe reliable service. He also reiterated I&M's effective notification and customer interaction efforts.

Finally, Mr. Isaacson noted that it costs approximately 10 times as much to install a distribution line underground as compared to overhead. He also discussed the need to respect the rights a utility may have under a valid easement. Mr. Isaacson pointed out that it would be inappropriate to recommend a set of standards that would contradict validly executed easements.

3. Indiana Statewide, Jurisdictional REMCs and Wabash Valley.

(a) Mr. Kiess. In general, Mr. Kiess testified that if the Commission adopts uniform standards for vegetation management, rural versus urban areas, then rural electric cooperatives may be saddled with standards that make little practical sense and could cost rural ratepayers significantly higher rates. Mr. Kiess also testified that standardizing utility tree trim practices across all Indiana utilities may not help customers understand their own utility practices any better and that utilities must have flexibility in vegetation management practices. Mr. Kiess testified that it is not practical or even possible to notify a customer several weeks in advance of tree trimming to ensure that a customer could be present at the time of tree trimming in every instance, or to provide detailed written materials to a customer every time the utility undertakes to trim trees prior to the day of trimming.

Specifically, Mr. Kiess testified that allowing a customer to be present on a regular basis might create a safety concern and it would add responsibility to the crews to make sure that the homeowner is safe and outside of the hazard area. Mr. Kiess testified that a one-size-fits-all policy that the utility must remove debris in call cases is not consistent with situations where the landowner requests that the debris be left in place and with emergency storm damage situations and that it would be impractical and would lead to more disputes about debris removal if a customer and a utility had to determine which debris was caused by the utility's tree-trimming crews as opposed to debris caused by the natural storm damage. He also testified that a utility's main goal when responding to storm damage is to ensure that the area is safe and to restore

power as quickly as possible and that member customers would have to wait even longer to have their power restored if, during the storm, all crews were expected to sort and then remove debris from every location. Finally, he testified that requiring a tree-trim crew to return to a location to remove debris in the case of storm damage would dramatically increase the cost of storm damage restoration incurred by utilities.

Mr. Kiess testified that standardized utility clearances and trimming cycles could create a substantial expense to electric cooperatives providing service in rural and heavily forested or hilly terrain. He explained that a 3-year trim cycle might be possible in an urban or suburban setting, but that that same cycle could multiply the vegetation management costs in heavily forested and hilly rural terrain and risk reliability problems. He cautioned that if standards are developed for vegetation management they should take into account the differences between transmission and distribution management requirements.

With respect to the cost of burying distribution lines, Mr. Kiess testified that the savings from avoiding long-term costs of tree trimming and vegetation maintenance do not offset the short-term initial costs to bury a line in rural locations. Finally, Mr. Kiess testified that if Mr. Goodman believes that a particular utility is violating state laws or the state constitution, he should deal with that matter in civil court, not by adding layers of complexity and cost to the member owners of electric cooperatives.

(b) Mr. Burch. Kevin Burch, Manager of Operations for Harrison, provided testimony to demonstrate that tree-trimming procedures in urban settings may not at all be appropriate in rugged, rural terrain. He testified that in these types of areas, the utility intentionally trims more than its standard easement due to the difficulty it has in trimming. He testified that in certain areas it is difficult to drive a vehicle along the easement and most of the work is done by hand, causing the vegetation management to be inefficient, time-consuming and costly. For that reason, he testified that Harrison trims and cuts as much as possible to extend the time between trimming events. Finally, Mr. Burch testified that based on his experience in maintaining electric distribution facilities in rural areas, standardized tree-trimming clearances and cycles do not make sense. He testified that Harrison has been devastated by Hurricane Ike and a major ice storm in the last 15 months, and that past history shows tree-related outages are its main cause of outages. He testified that any attempts to reduce line clearances or anything that would slow its process would be detrimental to the overall reliability and increase operating costs which would be passed along to its member customers.

4. IPL.

(a) Mr. Walker. Mr. Walker explained that IPL's hanger is similar to the I&M version noted by Ms. Armstrong. He added that the door hanger is the final step in IPL's notification process and reconfirmed that IPL provides additional notification and makes other information available to customers. He also stated that if problems (such as a hazard tree or a tree-house too close to a power line) are identified to IPL line clearing representatives when they are working in the field, the property owner is contacted. He also reiterated that IPL offers "Safety 101" demonstrations to teach students, police and fire personnel, and business and community groups, in a visual way, how electricity is produced, how to use it safely, how to stay out of its way, and what can happen if you don't. Mr. Walker also testified that contact information is provided and stressed that IPL works with customers to address their concerns before the pruning occurs. Mr. Walker testified that if IPL's trimming crews damage property such as a fence, gate, storage barn, etc., the customer may contact IPL or

Wright Tree Service. He also testified that IPL uses its best efforts to resolve such matters to the customer's satisfaction. Mr. Walker disagreed that the utility should remove debris, including debris that results from the utility's storm restoration efforts.

Mr. Walker also disagreed with Mr. Goodman's proposal which appears to prohibit trimming outside the public right-of-way and easements absent the utility's compliance with his proposed requirements. Mr. Walker explained that Mr. Goodman's proposal would adversely affect IPL's ability to comply with ANSI A300. He testified that compliance with ANSI A300 is one of the reasons why trees are pruned beyond the edge of a public right-of-way or easement. Mr. Walker further testified that pruning based on the arbitrary location of the public right-of-way or easement boundary, rather than modern arboriculture standards, would weaken trees, spur rapid re-growth and have the potential for causing more frequent electrical interruptions.

Mr. Walker disagreed that IPL personnel acted unreasonably and ignored Project Cooperation by prohibiting self-trim contracts if the lines are next to routine transmission lines. He also testified regarding the insurance requirement in IPL's self-trim contract and explained IPL's decision to eliminate its policy regarding self-trimming. He explained that the terms of the self-trim contract were intended to provide flexibility while balancing the need for safety and reliable service. In so doing, he reiterated that the self-trim option was contingent upon site specific circumstances. Similarly, the self-trim option was not available where the line voltage exceeded 13.2 kV. The hazardous nature of the pruning activity increases with voltage above this level. Furthermore, lines on the bulk electric system do not feed individual residential customers. Rather, they feed substations and larger customers. Outages on lines that are part of the bulk electric system impact a larger number of customers than other lines. Therefore, it is not advisable to permit maintenance of these lines to be performed by individual customers. Mr. Walker also confirmed that IPL has reconsidered the self-trim option and after further consideration of the pros and cons of that option, has determined that it no longer intends to offer the self-trim option in the future.

Mr. Walker also disagreed that the Commission and OUCC should supervise the development of customer education information informing property owners of their rights, obligations, and the impartial dispute resolution process as well as sound tree selection and placement around power lines, and the utilities should be required to provide that information to customers and property owners. He explained that this proposal would unnecessarily increase regulatory costs. He also observed that no party has identified any problems with existing materials. He therefore concluded that it seems unnecessary for the Commission to adopt a new formal process to fix something that is not broken.

Mr. Walker also disagreed with the comments of Mr. Phil Ping, an Indianapolis arborist, which related to the settlement of a past lawsuit, that the major of the complaints that he and IPL representatives investigated were valid. Mr. Walker explained that he visited the locations and met with the customers involved with the lawsuit, which was resolved years ago. He also explained that there was no ANSI A300 compliance issue with the majority of the locations and that customer complaints about notification and debris removal were addressed by the procedures adopted in Project Cooperation.

(b) Mr. Bentley. Mr. Bentley disagreed that the Commission should eliminate IPL's tariff and adopt Mr. Goodman's so-called "Bill of Rights." He explained that Mr. Goodman admission that "90 to 95% of the problems expressed by property owners could have been avoided if the utilities drop their attitude" showed that the focus of the inquiry

should be on addressing attitude, not on changing long standing tariff provisions or imposing costly new regulations. Mr. Bentley explained that if adopted, Mr. Goodman's proposals would impose significant and costly changes.

Mr. Bentley explained that he is the person responsible for the restoration of service following storm events and that he knows from personal experience and electric utility expertise that safety, reliability and mitigation of outages drive IPL's vegetation management program. He also criticized Mr. Goodman for ignoring the testimony of IPL Witness Shruba, filed on August 19, 2009, which demonstrates that IPL's tree pruning budget and actual costs have increased over the past decade. Mr. Bentley also testified that in Cause No. 41962, the Commission investigated IPL's provision of reliable service due to concerns about the length of time it took to restore service following the storms of July 8, 2001. He explained that the Commission's decision in that investigation was entered on February 6, 2002, and that IPL's attention to vegetation management reflects IPL's efforts to respond to the Commission's concerns and to comply with the performance requirements established in that docket.

Mr. Bentley explained that Mr. Goodman's testimony regarding IPL's application of ANSI A300 standards reveals that he has failed to accept much of the advice he may have been given by such experts and agencies. Mr. Bentley also disputed Mr. Goodman's comments that certain cuts that are consistent with ANSI A300 standards "often create a dangerous condition where an unbalanced tree during a storm may fall and damage property or kill or injure people" and that directional pruning "can result in unbalanced trees which may prove dangerous in the future." Mr. Bentley also disagreed with Mr. Goodman's repeated accusations that IPL engages in abusive tree trimming practices in violation of ANSI A300 standards. He explained that although Mr. Goodman insists that "tree lined yards and streets [ ] could flourish" if electrical lines were to be buried, Mr. Goodman failed to consider the extremely high financial cost of burying lines as well as the extensive harm that burying lines would inflict on trees whose root structures would be adversely impacted.

Mr. Bentley also explained that despite his representations to the contrary, it is apparent from his testimony that Mr. Goodman is opposed to various aspects of the ANSI A300 standards and would prefer the use of discredited pruning methods. Mr. Bentley observed that Mr. Goodman does not explain what pruning method should be used as an alternative to directional pruning which modern arboriculture endorses. Mr. Bentley concluded that by adhering to the findings and conclusions of experts that are embodied in the ANSI A300 standards, IPL is acting in the best interests of the community at large.

Mr. Bentley also disagreed with Mr. Goodman's position that references to Federal regulations, such as FAC-003-001, are irrelevant. He testified that IPL and other utilities are in the best position to make the difficult decisions regarding the need to trim or remove trees and other vegetation that is encroaching on their lines. He also explained customers lack the proper training to fully understand the complexities of the situation, make judgments without all the facts, and are not cognizant of the dangers that face the utility workers who must deal with the aftermath of a winter storm when temperatures are below freezing and are having to contend with fallen branches that have caused entire neighborhoods to go black.

Mr. Bentley reiterated that the tariff does no more than provide IPL the necessary authority to access and maintain its facilities, including the right to trim and remove trees located on a customer's property, as, in the Company's judgment, are reasonably necessary to the operation and maintenance of such facilities. He also explained that if IPL's tariff provisions

were revoked or new conditions imposed on the exercise of this tariff authority, IPL's ability to provide reliable service will be impaired and outage restoration costs would increase significantly. He added that this increased cost will ultimately be borne by customers through the ratemaking process. He concluded that it seems self-evident that taking steps to prevent unneeded costs is in the best interests of property owners and IPL's customers.

Mr. Bentley also responded to Mr. Goodman's criticisms regarding the Commission's field hearing procedures, including Mr. Goodman's claims that the Commission's field hearing procedures were inadequate and allegedly reduced the number of witnesses who supposedly would have spoken out in opposition to IPL and in favor of Mr. Goodman's proposal.

Mr. Bentley also rejected Mr. Goodman's contention that utilities should be required to pay compensation for tree limbs and tree removals on private property plus additional compensation for diminished property value and restrictions on use of property. Mr. Bentley explained that Mr. Goodman's arguments fail to recognize the significant benefits received by customers to whom IPL provides electric service and that the tariff provisions that require customers to permit IPL to properly maintain its facilities, including pruning vegetation, are reasonable given the importance of safety and reliable service. Mr. Bentley further explained that because customers pay ordinary and necessary costs of operating the utility through the ratemaking process, Mr. Goodman should be interested in encouraging IPL to hold down its costs and opposed to paths that would lead to increased utility expenses.

Mr. Bentley concluded that Mr. Goodman's proposals would be very costly and difficult to implement. Mr. Bentley also explained that Mr. Goodman's proposals for "compensation" and additional easements are philosophically at odds with the established tariff system. He testified that it is his understanding that tariffs are terms and conditions of receiving electric service and that the tariff provisions that Mr. Goodman is attacking represent a reasonable tradeoff between IPL and its customers. In exchange for IPL's continuing efforts to provide safe, reliable and economic service to its customers, the customers allow IPL to go on their properties when necessary to access and maintain its facilities, including doing the trimming required and restoring service during power outages.

Mr. Bentley testified that the trees that IPL on some occasions has provided to customers are not generally visually comparable or identical with a removed tree. Replacement trees are typically small trees or bushes of a type compatible with planting under overhead lines. He further explained that the concept of a "replacement" seems to imply that something of value was lost by the customer. Mr. Bentley rejected that premise because the original removal was fully authorized by the tariff as a normal condition of service and for which compensation or "replacement" is not due. Thus, the rationale underlying the tariff excludes the notion that either compensation or replacement trees should be due as long as IPL trims pursuant to the tariff.

He explained that IPL does not currently budget significant monies for those purposes, so any new requirement for them would create new costs to be ultimately borne by its customers. He also explained that since the tree canopy is not uniform across IPL's service area, and by definition the proposed payments would be due to customers who happen to have trees near lines, the result would ultimately be for all customers to pay for utility payments to only some, with situations like having customers in, say, Beech Grove or Wanamaker, effectively paying for payments to customers in Traders Point or Washington Township. Mr. Bentley expressed his doubt the paying customers will favor that and concluded, given the struggling economy and other cost increases associated with existing and anticipated environmental regulation, utilities

and regulators should focus on controlling costs, not adopting new rules that will cause costs to increase significantly.

(c) Mr. Cieslewicz. Mr. Cieslewicz disagreed with Mr. Goodman's suggestions that the Commission require a panel of experts to establish the necessary safety clearances for lines up to 200 KV and that the Commission should adopt uniform line clearance standards. Mr. Cieslewicz explained that "safety clearances" already exist in current OSHA requirements and they have been developed (and are routinely updated) by a "panel of experts". He also noted that "uniform line clearance standards" already exist in ANSI A300 and they were also developed (and are routinely updated) by a panel of experts. The same can be said for FAC-003 and the NESC Rule 218.

Based on his past involvement with the crafting and development of numerous UVM standards and regulations, Mr. Cieslewicz testified that he was certain that if a panel of experts is convened, they will come up with documents similar, if not identical, to those already found in ANSI A300, FAC-003 and the NESC. Each of these documents was crafted by panels of experts who recognize the variability and complexity in performing utility vegetation management work. Mr. Cieslewicz also explained that the NESC was developed by a panel of industry experts to require vegetation management work on distribution circuits, FAC-003 was developed by a panel of industry experts to require vegetation management on transmission circuits, and ANSI A300 was developed by a panel of industry experts to define "how" the work should be completed. Both the NESC and FAC-003 are currently enforceable by the appropriate agencies, and ANSI A300 is utilized by IPL and other utilities in the state. He also testified that all of these existing and enforceable requirements are also complemented by OSHA safety requirements which mandate the safety procedures for this work.

Mr. Cieslewicz stated that he does not believe that a revised permit process can be promulgated or enforced through a public utility commission proceeding, but instead would require legislative action, or changes to local tree ordinances and/or building permit provisions.

Mr. Cieslewicz disagreed with Mr. Goodman's proposal that the Commission mandate a notification process modeled after Project Cooperation but amended to include the following: (1) a prior visit to each homeowner to discuss and plan the proposed trimming; (2) the actual day and time trimming is planned; and (3) an effective dispute resolution process to include step-by-step procedures whenever a customer disagrees with the planning trimming." He also disagreed with the proposal that a utility should not proceed with the planned trimming until a resolution has been reached. Mr. Cieslewicz testified that IPL currently has a notification procedure that is far more robust and labor intensive than most (if not all) other utility companies in North America. He explained that if the measure of reasonableness in notification procedures is a comparison to the rest of the industry, then the required notification process should include a single attempt to contact the homeowner and placement of a door hanger with contact information should they have any questions. If the customer does not respond to the door hanger, then the work typically proceeds. That is the way that the overwhelming vast majority of utility companies notify customers of pending work.

Mr. Cieslewicz also explained that because only a small amount of customers across North America initially refuse to have the work done in the first place, Mr. Goodman's suggestion would create a situation where the vast majority of customers (who apparently are OK with required UVM work) would be compelled to meet or talk with a utility representative. He also disagreed with Mr. Goodman's suggestion that appointments should be made with

customers as to when exactly the work will be done because this will be an inconvenience to the vast majority of customers who will now be called and asked to arrange for an appointment. Mr. Cieslewicz also explained that Mr. Goodman's suggestion could easily double the current costs for UVM in the state. Mr. Cieslewicz disagreed that effective dispute resolution process should include step-by-step procedures whenever a customer disagrees with the planning trimming. He noted that Mr. Goodman gives no details how this would occur. For example, should the utility company wait to clear a tree from energized lines if it is in peril of causing an imminent outage if a customer doesn't want it pruned? Should they stop work during a storm restoration effort if the customer has a complaint? What constitutes a reasonable period of time? This suggestion ignores existing remedies to resolve complaints, and also proposes a new layer of oversight which can only serve to stop or slow down required work. He concluded that trees will continue to grow towards the lines and will not respect a new (and unique in North America) dispute resolution process.

In response to Mr. Goodman's suggestion that prior to trimming or removing any tree its location must be determined to be in a right-of-way, or an easement, or on private property, Mr. Cieslewicz explained that because Mr. Goodman fails to differentiate between whether he is talking about transmission or distribution vegetation scenarios, it is difficult to determine exactly what Mr. Goodman is suggesting. Mr. Cieslewicz also explained that in cases involving transmission corridors the utility companies generally have easement documents that define the exact dimensions of the ROW. On distribution lines, the facilities are generally located on a public ROW or utility easement. However, trees and their branches are not confined to these spaces. He also concluded that if Mr. Goodman is suggesting that the utility should survey each property prior to doing any work, the suggestion is unworkable and would be financially onerous on the utilities and ultimately the ratepayers as it would result in a doubling, if not tripling, of current utility vegetation management expenses in the state.

Mr. Cieslewicz explained that the Wire Zone/Border Zone practice is not intended to be applied to distribution facilities, but is almost exclusively applicable to transmission rights-of-way where large easements allow for such practices to be utilized in order to create a stable community of vegetation under and adjacent to transmission lines. He further explained that application of this approach on distribution lines (particularly those found in urban environments) would require the wholesale removal of many customers' current landscaping.

He also rejected Mr. Goodman's suggestion that utility companies should acquire the same types of easement agreements for distribution lines that currently exists for transmission ROWs in order to accomplish this. Mr. Cieslewicz explained that this suggestion is analogous to suggesting that utilities should buy half of the land in any given community in order to serve the community electricity, since any typical street has utility lines on one entire side of the road. He also testified that the suggestion would be unworkable, and cost an incalculable amount of money which would ultimately be borne by the ratepayers, many of whom would now be asked to give up their land rights. Mr. Cieslewicz also rejected Mr. Goodman's comment that references to safety and reliability are a smoke screen. He explained that because on average one tree worker dies every week and a half in this country because they are working on trees located too close to energized power lines, there can be no argument that tree and power line conflicts present a serious threat to electric service reliability and public safety. The largest single threat to keeping the lights on and power flowing is trees and vegetation conflicting with energized lines.

Mr. Cieslewicz also disagreed with representations made in Exhibit CHG-2 regarding a

prior lawsuit in which he and Phil Ping were retained as experts to visit fifty-two properties to investigate complaints against IPL. Although he agreed that he and Mr. Ping worked on that old case, he testified that Mr. Ping's characterization of their findings is not consistent with Mr. Cieslewicz's memory of the facts. He explained that after jointly visiting each site where a complaint occurred related to that case, Mr. Ping and he jointly agreed that the vast majority of trees in question were indeed pruned consistent with ANSI A300. He also stated that it is not fair to suggest that the majority of complaints were valid when, in fact, the work was performed consistent with the best available pruning standards available at the time. Mr. Cieslewicz also disagreed with Mr. Ping's suggestion that a million dollar policy is not appropriate if an owner is going to hire another company to perform tree work in close proximity to energized power lines. Mr. Cieslewicz explained that this is actually the smallest amount of coverage expected for any contractor to have in place in order to perform this extremely dangerous work and there is nothing unusual about this requirement given the liability and potential of a costly accident.

In addition, Mr. Cieslewicz disagreed that standard clearance requirements for distribution lines should be established in order to provide clarity for customers. He explained that every major tree care organization agrees that pre-established clearing limits are a bad suggestion. There is no one-size-fits-all approach to "initial" clearances since each and every situation is different. He testified that promotion of one consistent clearance requirement (at time of work) disregards all of that is known about proper utility vegetation management and will result in damaging practices to the trees currently managed near power lines. Mr. Cieslewicz testified that the suggestion that initial clearances should be standard is based on a clear misunderstanding of the complexities of utility vegetation management methods and acceptable practices. To adopt standardized initial clearance distances is a guarantee of promoting improper and damaging practices on trees. He concluded that no expert who actually understands the complexity of vegetation management or arboriculture would advocate for pre-established clearing limits. They must be flexible.

Mr. Cieslewicz explained that trimming cycles are merely a measurement of the time that it takes to complete one full series of tree work on a particular electric system. Cycles generally vary between utilities based on a combination of factors ranging from quantity and species make-ups to available funding and electric system design. He testified that other regulatory cases in which he participated had dealt with standardized cycles, the suggestion was always premised on utilities "not" pruning trees frequently enough to ensure reliability. In other words, the use of mandatory cycles is most often used to increase the amount of pruning due to a perception that the utilities are not aggressive enough. He also testified that short of trying to incent utilities to be more aggressive in Indiana, cycle length is best determined by the utility that is familiar with the localized conditions and unique characteristics specific to their utility system. Setting a mandatory cycle length in Indiana, either shorter or longer, will have impacts on both cost and electric service reliability.

Mr. Cieslewicz disagreed with Ms. Armstrong's suggestion that utilities should be required to remove debris, including debris that results from the utility's storm restoration efforts. He explained that during typical storms, many tree-related outages are caused by entire tree failures. In these situations, large trees uproot and fall through electric facilities, almost inevitably blocking access to the facilities for repair. Often a single big tree will fall down through the power lines and end up lying across a typical city street. In each of these cases the utility must first clear the mess before they can restore power to the neighborhood, and in many cases, the utility is actually also clearing the street to allow the flow of traffic and emergency

vehicles. However, it is not the utility's responsibility to clean up the debris following this type of event. He also explained that in the overwhelming majority of cases, the only tree work that is performed during a storm or emergency is tied directly to the necessity of restoring power (putting the wires back up). It is not routine work. It is also important to understand that the cost to clean up debris, particularly for entire tree failures, can easily reach thousands of dollars for a single tree.

He concluded by noting that although the issues related to this case focus on what the utility should be compelled to do, or not do, and what they should pay for, the utilities did not plant the trees, they for the most part do not own the trees, and their facilities are not growing towards the trees. The problem is that other people's trees are threatening the delivery of safe and reliable power. Utilities (and ultimately every ratepayer) should not have to pay for the cost to clear up a problem caused by other people's property.

(d) Dr. Tate. Dr. Tate reiterated his opinion that IPL's vegetation management program when compared to other utility vegetation management programs is near or at the top of the list. Dr. Tate stated that he spent 3 days looking at thousands of trees across IPL's service territory and found no major violations of ANSI A300 standards. He also testified that when the photographic images he took of pruned trees are compared with examples of trees found in the ANSI A300 standards; ISA Best Management Practices and the Shigo Guide used in his Responsive Testimony, it can be seen that the trees were pruned to the letter of the standards; best management practices and the Shigo Guide. Dr. Tate also explained that he observed no excessive cutting and no cutting greater than 25 percent of the annual live crown. He also observed that the point to consider in the discussion of excessive pruning is that the ANSI A300 standards (6.1.4) say that "Not more than 25 percent of the foliage should be removed within an annual growing season." When larger trees of fast growing species are in the initial stages of being directionally pruned, it may be necessary to remove more than 25 percent of the annual growth during the first cycle. He also observed that in this section, of A300, the standards say "should" not "will" or "must." Paragraph (6.1.4) goes on to say "The percentage and distribution of foliage to be removed shall be adjusted according to the plant's species, age, health, and site." Dr. Tate testified that he interpreted this statement to say that fast growing trees may have to be pruned back more than slower growing species to assure compliance and to maintain safety as long as the tree's health is not compromised. He also stated that removal of 25 percent of the live crown is a substantial amount and may appear excessive even though it follows the standards.

Dr. Tate also disputed Mr. Goodman's allegation that the lack of uniform standard is an issue that needs to be addressed. Dr. Tate explained that the arboricultural industry recognizes, promotes and accepts the pruning methods set forth in ANSI A300 standards as well as the ISA Best Management Practices and the Shigo Guide. These publications are intended to be performance standards for the development of pruning specifications. They are the "how to." Specifications developed from them are the "will do." Individual specifications by utility companies can vary slightly from the standards according to the utility's objectives, applicable laws, the mature size, wood strength and growth of individual tree species on a specific site as well as climatic influences such as wind and weather (the frequency of ice storms and tornados for example). Because of these factors utilities do not develop identical utility vegetation management programs. Minor variations in pruning practices occur and it is common to find one utility pruning program that is different from another's. Trees are unique biological entities and are (and should be) managed as such.

Dr. Tate also observed that Mr. Goodman seeks the Commission to ban the utility pruning methods set forth in the ANSI A300 standards. Dr. Tate explained that other than topping, the types of cuts to which Mr. Goodman refers ("V-cuts, side-cuts, and "L" shaped cuts") are perfectly acceptable and are shown as examples of correct pruning in the Shigo Guide (page 21) as well as in the ISA Best Management Practices (page 9, Figure 8; page 10, Figure 9 and page 11, Figure 10). Dr. Tate noted that he had photographed IPL-pruned trees and compared them to figures found in the ISA Best Management Practices of correct pruning examples and determined that they matched exceptionally well.

Dr. Tate also explained that according to ANSI A300 (page 4, 4.51), topping is not an acceptable pruning practice. It is defined as "[r]eduction of tree size without regard to tree health or structural integrity." This standard is silent in regard to excurrent coniferous species (pines, spruces, firs etc.) but does refer to trees that are growing directly under utility conductors (facility/utility spaces) by stating they "...should be removed or pruned." He also observed that guidance is provided in the Shigo Guide (page 31), which refers to conifers planted directly under lines. The Shigo Guide goes on to say, "[t]he leader or the entire tree must be removed." Dr. Tate explained that there is a considerable difference between removing the central leader of a conifer tree and topping or rounding over a decurrent species (maple, sweetgum, oak etc.). Dr. Tate indicated that during his inspection tour, he saw no topped decurrent trees in IPL's service area. He also stated that he did see, and documented by photograph, coniferous trees on which the leaders had been removed to a lower whorl of branches to meet the clearance requirements of the conductor voltage and the growth of the tree.

Dr. Tate explained that he saw no examples of excessive pruning as a result of "stretching cutting cycles." Instead, tree species that displayed the most rapid growth (silver maples and mulberries for example) were pruned to a greater degree to hold them from growing into the conductors for a three-year period than slower growing species such as oaks. He also explained that although it may appear to the layperson that fast growing trees have been pruned excessively because pruning to a proper lateral on fast-growing species to prevent growth into the clearance zone may require additional cutting, which is the correct pruning method for the health of the tree and optimum clearance. Dr. Tate further explained that stub-pruning and tipping the limb some distance from a lateral branch severely damages the tree by encouraging fast growing sprouts and end-branch cracking. Because these types of cuts do not close over as readily, they also provide entryways for decay fungi. He concluded that these practices are detrimental to the health of the tree.

Dr. Tate disagreed with Mr. Goodman's allegation that some utilities are cutting all trees based on the fastest growing species. Based on his observations, Dr. Tate stated that this contention is not correct with regard to IPL. He explained that in most cases looking along the conductor line from pole to pole, he observed limbs from faster growing tree species as close to the conductors as limbs from slower growing species. He also looked at individual limbs and saw limbs on slower growing species not cut back as far as those on faster growing species. For example, oaks were not pruned as far back as mulberries and silver maples. He stated that if all species were pruned to the growth of faster growing species, the slower growing ones would have been a much greater distance from the conductors, which was not the case.

Dr. Tate disagreed with Mr. Goodman's assertion "L" shaped cuts, "topping" and "V" cuts" create an "unsightly condition". He explained that what Mr. Goodman may say is in an "unsightly condition" is in a more healthful condition and is safer from limb/conductor contact than one that Mr. Goodman might contend "looks good." Dr. Tate also explained that even if

trees that are rounded over may look better to the layperson right after pruning than trees that have been directionally pruned, the potential for causing more frequent electrical interruptions is greater because of rapid regrowth. In addition, rounding increases the susceptibility to insects, diseases and structural failure.

Dr. Tate refuted Mr. Goodman's repeated assertion that certain types of tree trimming methods should be banned because they allegedly create a dangerous condition where an unbalanced tree during a storm may fall and damage property or kill or injure people. Dr. Tate testified that there is no evidence in the arboricultural literature of directional pruning leading to tree failures. In addition, he stated that he has seen thousands of trees directionally pruned and has never seen a failure as a result of it. He also testified that he has seen tree failures as a result of the practices of rounding over and topping. Dr. Tate also testified that because root systems of trees directionally-pruned grow in a radial pattern of spokes originating from the base of the tree the same as trees not directionally-pruned, the root system of a tree is not influenced by directional pruning.

Dr. Tate explained that removing whole branches when practical, rather than pruning back to unsuitable laterals, is the proper arboricultural practice when obtaining specified clearances such as 10 feet. He explained that the aim of utility pruning is to make as few cuts as possible. Pruning back to the main trunk most often satisfies this aim even though it may appear to be excessive to Mr. Goodman or other laypersons. Dr. Tate also disagreed with Mr. Goodman's contention that without uniform vegetation management standards property owners will be treated differently for the same or similar tree-related problems. Dr. Tate explained that there are uniform standards and that they are being applied equally by IPL according to the voltage of the lines, the location of the tree and its species, size and growth pattern. Dr. Tate explained that the tree pruning he observed was not done with regard to the ownership of the tree, the socio-economic status of the neighborhood and the relationship of property owners to IPL's arborists and contractors.

Dr. Tate also disagreed with Mr. Goodman's assertion that directional pruning cuts devalue a homeowner's property. Dr. Tate explained that directional pruning is a prescription to insure the tree's continued good health and structural integrity. He stated that trees directionally pruned are less likely to cause electrical outages and conductor breakage, both of which could cause inconvenience and great potential for human injury and death. He added that a tree near a conductor that was rounded over, topped, stub-cut or tipped would be rated lower in value than one directionally pruned. Dr. Tate also testified that his general assessment of the value of trees, species and condition aside, growing along Mr. Goodman's street is that they would have a much lower value than if they were the same trees growing in an open area away from conductors. Their low species rating and general condition would further lower their value, not the fact that they have been directionally pruned.

(e) Mr. Perry. Daniel Perry, who holds a BS in Forestry from Purdue University and has been a certified arborist since 2003, is currently employed by IPL as its "Contract Coordinator." Before being hired by IPL in June 2008, Mr. Perry was the Contract Utility Arborist required by Project Cooperation in 2005. In his testimony, Mr. Perry responded to Mr. Goodman's charge that he was a victim of IPL's tree trimming practices. His contemporaneous report regarding the incident with Mr. Goodman is included in his testimony as Respondent IPL Exhibit DRP-Reply at 1. Mr. Perry provided the Commission with background information regarding the trimming and subsequent removal of a silver maple tree from in front of Mr. Goodman's property. He explained that the trunk of the tree was located near a 34.5 kV

transmission line that is part of IPL's bulk power system used to feed small to medium industrial customers. Mr. Perry stated that after being notified by IPL that the tree would be pruned, Mr. Goodman contacted the work planner to discuss the status of the 34.5 kV line. Mr. Perry explained that the work planner contacted him by phone to determine if the line was energized. Mr. Perry stated that he investigated the line and determined that it led to the substation that feeds a Community Hospital. He concluded that the line was energized and informed the Wright Tree Service work planner. Thereafter, the large silver maple in the front yard was pruned away from the line.

Mr. Perry also testified that, on August 4, 2005, he met with Mr. Goodman to discuss his concerns regarding the tree trimming. He explained that he told Mr. Goodman that the tree had been trimmed in accordance with ANSI A300 standards and ISA guidelines. He also stated that Mr. Goodman said that he was not notified after the line was determined to be active and that had he been notified, he would have elected to have the tree trimmed by someone other than Wright Tree Service. Mr. Perry explained to Mr. Goodman that IPL does not allow self-trimming near transmission lines and, as a practical matter, that this means that IPL does not permit self trim on lines with voltage over 13.2 kV. His impression at the time was that Mr. Goodman did not want IPL or Wright Tree Service on his property. He wanted to have someone other than IPL or Wright Tree Service to prune the tree.

Mr. Perry offered Mr. Goodman the following two choices: removal and replacement of the tree, or "shaping" of the tree. After Mr. Goodman told him that he would want a tree replacement of something comparable in size to the existing tree, Mr. Perry explained that the replacement tree option would provide a power line compatible tree. Mr. Perry told Mr. Goodman it would be best to have the tree trimmed/shaped. This was because a tree of that size and species is rarely ever found in a nursery for commercial sale. Even if one was found, and could be delivered, the same problems would arise; the limbs would need to be trimmed. Mr. Perry also explained to Mr. Goodman that it would be better for the health of the tree to do the shaping in the early spring of the upcoming year. Mr. Perry testified that Mr. Goodman ultimately requested IPL remove the tree and grind the stump and that IPL performed that work at no cost to Mr. Goodman.

5. NIPSCO. Mr. Dehring explained that it is NIPSCO's policy is to provide customer notice through a personal discussion or door hanger before work begins. This communication provides information about the work and contact information for questions or concerns. Scheduling trim work around a variety of customer availability timeslots, to ensure customer presence during trimming, would cause concern as it would slow work and increase costs for all. Mr. Dehring testified that NIPSCO has strengthened its response process related to complaints. When a complaint is received, NIPSCO has implemented a 48 hour maximum response time for its forestry staff to make contact with the customer to resolve his or her concerns. NIPSCO focuses on the health and safety of trees by mandating that the contractors providing the work follow the nationally accepted practices as outlined in the ANSI A300 standards.

Mr. Dehring expressed concern with a universal 10-foot clearance standard. According to him, NIPSCO and its contractors attempt to balance the impact on the tree while maintaining the most appropriate clearance to promote safety and reliability. This approach takes into account the type of vegetation, growth rates, physical location of the vegetation with regards to the location of the lines, pruning practices, voltage and physical location of the lines, public safely, and tree health. For all of these reasons, a single clearance standard would be sub-

optimal.

Mr. Dehring testified that it is impossible to separate debris created by the storm from that created through restoration. Mr. Dehring agreed with Mr. Goodman's recommendation that utilities provide information regarding selecting the right tree and putting it in the right place. Mr. Dehring also agreed that the notification process that was used in the past needed strengthening, which NIPSCO has done. Mr. Dehring testified that requiring a discussion with each homeowner, and requiring that the date and time of the work be planned would be prohibitively burdensome on the utility. Mr. Dehring testified that customers have the right to trim their own trees at their own expense, but noted that contractors hired to perform this work, within ten feet of NIPSCO's high voltage conductors, need to maintain certain OSHA certifications. In general he was concerned that private companies, looking to please their customer, would not trim the tree to the appropriate clearance. He was also concerned about Mr. Goodman's suggestion regarding compensation for trees that must be trimmed or removed, as this proposed policy has the potential to allow the interests of individuals to adversely impact the public good.

Mr. Dehring testified that replacing existing functional and reliable plant with buried lines would be a significant expense that all ratepayers would bear in the interest of a few. In addition, customers would be required to pay for individual service entrances. Instead, NIPSCO evaluates projects individually to determine the most appropriate way to replace plant when necessary. Additionally, NIPSCO has replaced aerial lines with buried lines in situations where service has frequently been disrupted. According to Mr. Dehring, utilities should be allowed to exercise good judgment in constructing and operating facilities that meet the needs of its customers in the most appropriate and cost effective way possible. Mr. Dehring testified that it is difficult to set uniform line clearance standards when the electric system and related vegetation is not itself uniform. Instead, NIPSCO relies on vegetation management knowledge and a variety of independent standards.

6. Vectren. Mr. Luttrell stated that requests for state wide trimming requirements, if adopted, will add significant costs for ratepayers and/or limit utilities' ability, as experts in this area of operating an electric system, to deal with specific tree situations. Mr. Luttrell described the testimony at the Evansville field hearing given in support of Vectren's current tree trimming practices and the lack of customer complaints regarding those practices. Mr. Luttrell reiterated that Vectren's current redundant customer notification process gives customers ample notice of tree trimming and Vectren's adherence to procedures contained in the Shigo Guide and ANSI A300 result in reasonable tree trimming practices. Mr. Luttrell questioned Mr. Goodman's qualifications to recommend new vegetation management mandates regarding how best to conduct vegetation management particularly when all of Vectren's tree trimming activities are based on proven practices and well known industry publications that have been relied upon for many years.

Mr. Luttrell addressed Mr. Goodman's non-IPL focused recommendations. Mr. Luttrell stated that ANSI A300 provides a basis for determining good practices to generally follow but was never meant to dictate what to do in every single unique tree setting. A review of the standards reveals that not all elements of trimming are black and white; rather, a means of considering methods and approaches to issues is set forth and experts with experience consider this foundation in order to make decisions in the field. The art of tree trimming is not a one-size-fits-all process. Moreover, Vectren South already adheres to ANSI A300 standards. Mr. Luttrell testified that Mr. Goodman's recommendation

mandating an actual discussion with every property owner and requiring the date and time of trimming would severely limit the effectiveness and efficiency of a line clearance program that attempts to follow a trimming cycle. Mr. Luttrell reiterated Vectren South already engages in extensive good faith notice efforts and pointed out that some customers are gone for extended periods of time, are non-responsive, or may never consent to necessary trimming. He added that Vectren has very few tree trimming disputes and has a track record of successfully addressing them at the customer level. He reiterated his concerns about a new mandatory, legalistic dispute resolution process and pointed out customers currently can complain to the OUCC and Commission about this area of operation just like any other area of operation.

Mr. Luttrell responded to Mr. Goodman's recommendations regarding easement acquisition, property rights and owner compensation. He testified those matters are not related to mandatory tree trimming but rather are addressed when Vectren extends its facilities. In those instances, any easement issues do not get taken to the Commission, Vectren South resolves them. Moreover, he stated like several of his suggestions, Mr. Goodman focuses on potential issues with specific property owners, rather than considering the negative impact on all customers of driving up cost, delaying tree trimming, and diminishing the reliability of service. Mr. Luttrell emphasized that "whether by easement of any type, public right of way, Commission order or simply as a requirement of service, Vectren South must be allowed to trim trees to protect reliable service and public safety in an efficient manner."

Mr. Luttrell testified educating the public is very important and the level of education conducted by Vectren South has proven to be reasonable and does not need to be required to do more. He reiterated his direct testimony describing how Vectren South already provides customers with tree trimming and tree related educational material, in bill inserts, on the web, as part of an annual Arbor Day celebration, and through its Speaker Bureau, including information on the right tree in the right place. He stated Vectren South will continue its educational efforts and extend its full cooperation to the Commission in the future, but Vectren South's current customer education program is not deficient in any way.

Mr. Luttrell testified that line clearance distances should be sufficient to protect reliable service and public safety for the duration of the utility's trim cycle. He explained different trees grow at different rates. Southern Indiana has a slightly longer growing season than northern Indiana. The amount of rainfall year to year can also greatly impact the level of tree growth. Thus, if there were standardization of line clearances, the clearance distances must protect the provision of safe and reliable service while accommodating each utility's trimming cycle, species of trees and climate. He added that any line clearance standard must leave the utility with sufficient discretion to make longer cuts where needed to protect the health of the tree and to cut where needed to protect reliability and public safety.

Mr. Luttrell addressed Mr. Goodman's interest in a revised permit process in new housing developments to prevent trees from being planted in the wrong area. While not sure what permitting process is at issue, Mr. Luttrell explained that in working with developers on the extension of electric service, Vectren South reviews subdivision plans and the need for appropriate tree placement is already generally recognized and practiced by developers in his area. Mr. Luttrell explained burying lines is very expensive compared to overhead conductors and also has below ground maintenance and repair issues. He testified burying

existing overhead facilities is complex and problematic due to existing and mature infrastructure in place above and below ground. In addition, burying electric facilities could also require burying other overhead utilities like phone and cable further complicating the process.

Mr. Luttrell testified that managing and monitoring whether a homeowner is meeting agreed-to self trim frequency is difficult, costly to enforce and as property owners change over time, the trim frequency may not be maintained. He added that private tree trimmers working around energized facilities is dangerous and this work is best left to the utility crews.

Mr. Luttrell responded to Mr. Goodman's suggestion that utilities should mail notices 60 days in advance to property owners who adjoin where tree trimming is scheduled to occur. Mr. Luttrell testified perhaps the idea is the aesthetics of a tree needs to be protected by an entire neighborhood, rather than the owner of the land upon which the tree grows. Mr. Luttrell concluded that such adjoining neighbor notice is unnecessary, burdensome and inefficient.

Mr. Luttrell pointed out in storm restoration efforts, there is very little if any tree trimming to improve line clearance. Rather, the emphasis is on removing the limbs and trunks that have contributed to, caused the outage, or prevent the prompt restoration of service. Any "trimming debris" would be only incidental to the task of restoring service and it would be impracticable to differentiate between the few limbs that may be cut that improve clearance from those cut to restore service. Moreover, removing a few limbs that may be cut for line clearance from one property while leaving behind the major limbs and trunks that were cut in service restoration efforts on a contiguous neighbor's property would surely generate customer issues and complaints as to why one neighbor's tree debris was removed and the other's was not. He emphasized that after a storm, the focus is on promptly restoring service and maintaining safety.

Mr. Luttrell testified that utilities need some discretion in what tree trimming cycle works best for their region of the state, the characteristics of their service territory, the amount of rain year to year, and the species of trees they have to deal with. He pointed out the different lengths of growing seasons between southern and northern Indiana and variables such as levels of rain impact tree growth and trim cycles. He stated Vectren South also reviews reliability performance and industry practices and determines the cycle that meets the need to provide safe reliable efficient service. Mr. Luttrell said trimming all species to the same clearance distance should be at the discretion of the utility after considering the characteristics of its service area and the tree species it has to trim. He cautioned that this area demonstrates the problem of uniform requirements because trimming all species to the same clearance may result in some trees being trimmed longer or shorter than needed. He emphasized utilities need flexibility. For example, the Emerald Ash Borer is spreading in Indiana and the Department of Natural Resource has set specific requirements on how to deal with such diseased trees and their cut debris, requiring a species-specific strategy to deal with ash trees going forward. He stated bottom-line, the utility needs to have the flexibility to assess the specific situation encountered and make the appropriate decision while also being able to react to changing requirements.

C. OUCC. OUCC witness Armstrong disclaimed any intent to recommend that the Commission partially adopt or modify the ANSI A300 standards in any manner and

instead recommended that the ANSI A 300 standards should be adopted in their entirety. Although Ms. Armstrong recognized that some individuals could view compliance with those standards as being excessive or extreme, in such instances it might be preferable to discuss tree removal and potential tree replacement. Ms. Armstrong also recognized that Indiana utilities are aware of ANSI A300 standards and incorporate them into their vegetation management programs. She testified that OUCC would support establishment of standardized clearances and submitted that utility line clearances of at least ten feet (or more for higher voltage lines) are necessary to maintain the safety and reliability of a utility's distribution system.

Ms. Armstrong also testified that OUCC recognized the danger of extending the length of trimming cycles and would be supportive of a trimming cycle that is in the three to five-year range. Ms. Armstrong acknowledged that the majority of utility witness objected to certain of the notice requirements she advocated in her direct testimony as being overly prescriptive, too costly and would not produce the level of benefits to justify their costs. In response, she recommend that the electric utilities should provide affected customers written notice of their tree trimming schedule or possible work at least two weeks prior to beginning work. Ms. Armstrong also commented regarding the request that certain municipal electric utilities and rural electric cooperatives be exempted. Although she recognized that unique characteristics of some jurisdictional electric utilities can be taken into account by the Commission if it were to establish uniform standards, she opined that they should not forestall the adoption of a uniform set of standards for vegetation management that promote sensible tree trimming practices while keeping costs under control.

Ms. Armstrong summarized comments received from various consumers regarding their concern that allowing for more growth of vegetation would negatively impact the reliability of their own service and that they would have to pay higher electric bills if utilities were required to replace trees or significantly change current pruning practices. However, she noted that the vast majority of consumers objected to certain practices regarding trimming, often stating the utility had "butchered" or killed trees. She reiterated the complaint that several consumers received little or no notification of tree trimming. She also mentioned complaints regarding damage and the failure to remove debris.

Ms. Armstrong testified that the proceeding is not the forum for the redress of past perceived wrongs committed by utilities and their contractors. However, the proceeding had shown a need for better communication with customers regarding proposed trimming and allowing customers to be present during the activities. She noted that most of the utilities claimed to be implementing these practices as part of their vegetation management programs. However, she stated the anecdotal evidence received at the field hearings and through written comments suggests that these practices have not been uniformly carried out.

She also cited various practices that are beneficial to resolving consumer issues that were noted in the proceeding, including educating consumers regarding the relationship of their landscaping with overhead wires and facilities. She mentioned I&M's door hanger that specifically alerts a consumer when his new landscaping may interfere with I&M's distribution lines or facilities. She also mentioned tree replacement programs could offer a palatable solution to consumers who have lost a tree as a result of utility vegetation management practices. She also noted some utilities' policies of temporarily suspending planned trimming if the property owner could not be contacted by phone or mail. She noted that Vectren suspends its planned trimming

for a week after attempting to reach the consumer by mail if the company has not reached a property owner by phone or mail after leaving its informational door hanger. She noted that adopting and implementing this particular policy on notification may assist in avoiding or timely resolving any disputes.

Ms. Armstrong also testified that OUCC expects utilities to remove trimming debris. She also suggested that while the utility should be required to remove tree trimming debris that is created by its crews during storm restoration efforts, it should not be required to remove all storm-related debris. Ms. Armstrong noted that the OUCC recognizes that a utility must be able to access its facilities for maintenance and billing purposes, and the utility will assert this right in its tariff. Ms. Armstrong stated the complaints the OUCC has received related to this case indicate consumers' concerns that their utility is abusing the access rights provided in its tariff when it trims vegetation on their property. She mentioned IPL Witness Walker's testimony in which he stated that the easements IPL has obtained throughout its service territory are inconsistent and often insufficient to conduct necessary maintenance activities, but IPL's tariff provisions give IPL the additional clearance and access rights necessary to conduct business. While Ms. Armstrong agreed with Mr. Walker that IPL needs adequate access to its own facilities in order to provide reliable service to its customers, she voiced a concern that IPL has not secured proper access rights through its distribution expansion planning process. She noted that this investigation may not be the proper forum to address any conflicts between tariff language and private property rights but this will remain the source of great concern for many consumers.

Ms. Armstrong also testified that while pruning in accordance with ANSI A300 standards does not always produce an aesthetically pleasing result, OUCC, consistent with forestry experts and arborists, believes that it is more important to ensure the health of the trees and maintain the integrity of power lines than it is to preserve the aesthetic qualities of plants. She also testified that OUCC encouraged utilities to educate and collaborate with their customers before pruning was necessary. She noted that each utility differs in the amount of clearance it requires for distribution lines as well as the length of trimming cycles. She advocated standard clearances and trimming cycles to provide more clarity to consumers in placing vegetation in a location that will not interfere with utility facilities. Finally, Ms. Armstrong noted that OUCC believes that prudently incurred expenses associated with vegetation management are recoverable by the utility through its base rates. She also noted that the utilities should be entitled to seek cost recovery for those incremental prudently incurred expenses.

6. Field Hearings.

A. Introduction. The Commission held six field hearings in this Cause: (1) Muncie on August 31, 2009; (2) Indianapolis on September 2, 2009; (3) Seymour on September 8, 2009; (4) Merrillville on September 23, 2009; (5) Ft. Wayne on September 29, 2009; and (6) Evansville on October 7, 2009. Excerpts of testimony from the field hearing transcripts and written comments received from each of the field hearings follows:

B. Muncie field hearing. (Muncie Public Field Hearing Exhibit 1)

1. Sue Errington, State Senator for District 26, which includes Muncie and Delaware County.

"Over the past few months, I have received numerous complaints from constituents about trimming that has already occurred on their trees and also from constituents who have been notified that trees in their neighborhood will be trimmed. The latter group wants to know what recourse they have to prevent the extreme trimming of their trees that they have seen along Tillotson Avenue and Petty Road.

Everyone I've heard from acknowledges, as do I, the need for the utilities to trim and even remove some trees to ensure the safety and reliability of our state's electrical distribution system. When we turn on the light switch, we want the lights to come on. We certainly want to avoid as much as possible the massive power outages Muncie and Delaware County experienced during the ice storm in January of 2005; however, the reports I am receiving indicate that I&M and their subcontractors are going beyond the minimum clearances necessary to achieve safety and reliability.

The complaints fall primarily into the following categories, beyond save my trees, one what are my rights as a property owner; two, what statute or regulation gives the electric company authority to trim my trees and where can I look it up; three, what neutral State agency can I appeal to if the electric company and I disagree on the extent of trimming that is proposed, and how can I stop the trimming until this dispute is resolved?

Unfortunately, I have to tell them that there are no statewide regulations on utility tree trimming. It is up to each utility company in Indiana to create their own policies fro trimming trees away from the utility lines. This is similar to telling a litigant in a lawsuit that the opposing party is also the judge.

Some individuals are going to great lengths to protect their trees. One neighbor told me she stood under the tree where limbs would fall if the trimming proceeded. My own husband climbed up one of our trees marked for trimming and trimmed it himself.... [His] solution did work because when the trimmers arrived, they cut very little, and we were satisfied with the results.

Last summer, as a member of the Regulatory Flexibility Committee, I heard testimony from Indianapolis homeowners about what they termed 'abusive' trimming of trees on their properties. Their complaints were similar to the ones I'm hearing from my constituents in Muncie. This doesn't appear to be an isolated problem, limited to one utility company. I believe it requires a statewide solution. It is becoming obvious to me that Indiana needs to establish uniform standards of vegetation management for all electric utilities in the state. The OUCC testimony filed last week makes many appropriate recommendations. Testimony you hear in these field hearings may provide more. I urge you to look for best practices in other states. As a legislator, I feel a responsibility to facilitate the adoption of state policy, whether that ultimately is addressed through this cause investigation, a rulemaking proceeding, or statutory means."

2. German T. Cruz, Muncie.

"I speak today as a professional of almost 40 years in the design and restoration of

communities in 7 states. Moreover, I speak also as someone who understands the dynamics of land use and utility location....

Trees have verifiable value that produces great return on investment. Both the US Forest Service and the EPA have produced studies affirming the value of urban trees in the improvement of air quality, the reduction of energy consumption, the improvement of water quality, the reduction of stress, and the increase in community well being and sense of place (identity). Furthermore, it has also been found that trees promote safety and add value to properties....

[T]he removal of trees along our streets and alleyways has a deleterious impact upon our community equivalent to a tornado or other catastrophe. Moreover, it takes away our sense of place or identity thus preventing or demeaning any efforts to attract new residents or elevate the quality of life in the community...."

3. Andrew Seager, Muncie.

"This is a complaint about Indiana & Michigan Power Company's tree-trimming practices and a request that Indiana's [utilities] be required to follow nationally established tree-trimming standards.

What I&M is currently doing in Muncie is excessive, unnecessarily ruining beautiful and long-established trees and spoiling our streetscapes. It also appears to be highly arbitrary and capricious. Sometimes limbs are removed, other times the whole top of the tree is taken off. Sometimes the tree is cut down to the ground, other times the decapitated trunk is left standing. Sometimes trees relatively far from the power lines are sometimes taken down while other trees, closer to the power lines, are left intact.

[Regarding a tree near his rear property that had been pruned in May] Asplundh came back in July, however, and without any notice to me or the neighbors took the top off that tree....It is 25 foot from the power lines which are on the other side of the street. As the "before" photo shows, its limbs did not come near the lines. Second, assuming it did pose a safety hazard, why chop off the whole top? I called Asplundh to inquire and spoke with the crew foreman. He said the tree had to be topped because it could hit the power lines if it fell. He called this "storm-proofing." What a euphemism for decapitation! (The tree may indeed have been taller than the power lines, but that's true also for a great many other trees, even closer to power lines, that I&M did not cut down.) To add insult to injury, the foreman said that Asplundh would not take down the remains of the tree, the stump of which now stands without limbs or branches to a height of 18 feet. That is the final outrage. Not only has I&M's contractor killed or maimed the tree unnecessarily but expects me (or the city) to finish the job."

4. Terry Murphy, Muncie-Delaware County Economic Development Alliance, Yorktown.

"We face competition for economic development projects on a regional, national and international basis. It is not only important to attract new business and industry to replace jobs and tax base that are lost but it is even more important to work to keep the companies that are already here.

Electrical costs and reliability are huge factors in where a company decides to locate. It is equally important to commercial and industrial businesses that are already here. If we cannot provide a reliable source of power then we stand to lose these businesses [to] communities that can. Not having a reliable source of power results in huge costs to businesses in terms of downtime, equipment damage and repair, lost product, loss of productivity and more. These types of problems are not acceptable in today's competitive world.

Power companies need to take measures to assure that our existing companies are provided a safe and reliable source of power. Indiana Michigan has been a leader in doing just that...."

C. Indianapolis Field Hearing. (Indianapolis Public Fielding Hearing Exhibit 1)

1. Phil Ping, certified arborist, #1359A, Indianapolis.

"I'm the owner of a large tree care company here in Indianapolis for over 38 years. I have personally been stunned by IPL's unprofessional pruning practices while laying claims to be doing the pruning according to ANSI A300 standards. I am a certified arborist and have been for a number of years....

I've had clients who have had heart attacks or stroke as a result of the forced pruning that was done on their property, and they were so irate and felt invaded by this that it affected their health, and some of the pruning that was done, actually, as the previous speaker mentioned, served no purpose as far as keeping the lines cleared, and we're all interested in power coming to the home, so I'm not standing here as an uninformed tree hugger, so to speak, but I want the lights to be burning in my house as well as everyone else's. So, I do go out there with a level-headed understanding of what pruning clearance is about, the purpose of it, what needs to be accomplished, bit it goes way beyond that....

Steve Cieslewicz and I drove to home after home listening to IPL's mistreated customers lament the fate of their lovely trees to the indiscriminate cutting by IPL hired tree crews. One such family I would like to make special note of this evening was a very elderly husband and wife whose front picture window was now filled with a sign from a retirement home a half block away from their residence. Their conifers along their south property line were butchered down below the phone lines. They looked hideous, and now gave way to a dreadful invasion of their living room by the retirement home's signage. The wife lamented IPL's rough and rude handling of them and said, 'My husband fought in the Korean War defending our country, and now we are talked down to and bullied on our own property. What is this country coming to!' ....

Many complainants stated that they could not ask questions or even talk to the workers because they only spoke Spanish, a problem that I have personally experienced with IPL's hired tree trimming crews from Wright Tree Company....

This Commission has an opportunity to stop future injustices. Since IPL has blown the dust off Project Cooperation, it would be awesome and fair to all parties concerned to see this Commission empower that document and not only here, but statewide...."

2. James Spear, Indianapolis.

"Three summers ago, I was sitting in my home one morning, and I heard a chainsaw, and I couldn't imagine what was going on. I went out to the backyard, and there was a person up in the tree with a chainsaw cutting off limbs. Unfortunately, he didn't speak any English and I don't speak any Spanish, but as they were dragging limbs through my garden, which they totally destroyed my tomato plants, my herbs and a brand new ceramic bird bath that I just bought, a supervisor from the Wright Tree Company and a representative of the Indianapolis Power & Light Company appeared, and this person from the Indianapolis Power & Light Company told me in no uncertain terms that they could come on my property at any time and do anything they liked regardless of how far it was from the easement, and I had no right to protest, that all I had to do was sit there and watch.

Needless to say, I never received any compensation for any damage...."

3. Thomas Cieslak, Indianapolis.

"My 70 year old pine tree had all the branches on one side removed. It was planted over 10 foot away from the power lines, never touched or hung out over the power lines and never would. A trained arborist would never top a tree. I took the Master Gardener Program [through] Purdue University and the first thing they [taught] us about tree trimming is that a topped tree never heals and starts [its] decline because it opens the tree to insects and disease."

4. Nina Rose, Indianapolis.

"Approximately 2003 [or]or 2004 IPL/Wright trimmed 5 [or] 6 pine trees on the north property line. Those trees were 'butchered.' What was a beautifully landscaped yard is now an 'eyesore.' Those trees were the diagonal wind breakers for the area [from 1950]. As a result of the very bad trimming, the trees fell victim to straight line wind damage.

I am not opposed to and I understand the need to trim trees for utility service. But there is no need to butcher the trees, leaving them victim to disease and creating an eyesore.

Clean up was adequate. IPL never advised to my knowledge that tree trimming was to take place.

Along with addressing utility service needs, IPL/Wright needs to consider the health of the trees, the needs of the residents and the benefit the trees give to the community.

'Every' time I go out in my yard and look at my trees I get 'angry.' I get angry because the beauty was destroyed and the trees were simply 'butchered....'"

5. Carolyn Bryson, Indianapolis.

"The mutilation of trees is a significant problem; the trees are weakened and susceptible to disease then dying. The result is that the homeowner must remove the tree at their expense and the property value decreases. I recommend that troublesome trees be completely removed, with or without removing the stump. Trees that are pruned on one side should also be pruned on the other side to balance the tree. If trees must be removed, the utilities or right-of-way agency should assist the property owner to find and/or plant acceptable trees for that location. The

placement of utility lines at the private property edge of the R-O-W leads to incursion into the private property, essentially taking more property without compensation to the homeowner.

Many tree trimming crews are Hispanic – there should be an English-speaking supervisor with the crew at all times. The Indianapolis Power and Light representative was extremely arrogant and said they would do whatever they wanted to do. And, for the most part, that is what they did. IPALCO stated that the trees would not be topped. The tree trimmers said that they were told to top them."

6. Mabel Smith, Indianapolis.

"After being assured that there would be very little trimming necessary on our beautiful ginkgo tree, 6-8 men showed up with power saws--no overseer. We stopped them – but then Tom Walker (arborist) came (with workers) and gave us papers to take to our lawyer – basically taking responsibility for any and all power outages in the known world. Work had been done 3 years ago – with very little damage to the tree – Now Mr. Walker insists the tree be severely cut back. Even following the guidelines for distance to the power lines – he insisted all cuts must go all the way back to large branches – or even to the tree trunk. Otherwise the tree would be subject to possible disease. As we own the tree, it would seem to be our decision regarding the future health of the tree. He didn't own the tree. But, he is an "Arborist" and took great satisfaction in his title and authority."

7. Elizabeth Young, Indianapolis.

"I own approximately 3.74 acres.... Indianapolis Power and Light has lines along both the north and south property lines.... IPL's tree trimmers and/or IPL: 1. Do not give adequate notice of the date and time of tree trimming. After receipt of a general notice that trimming may occur in the next couple of weeks, I have to monitor my house closely – leaving for work late, coming home at lunch, etc., and being able to drop everything when they arrive. I support the idea of giving a date and time window, and would like to ensure that I am present before they cut; 2. Do not respect the easement boundaries. The trimmers climb trees and trim trees beyond the easement boundary, (and beyond the area needed to clear the power lines.); 3. Do not trim trees in a safe manner. The tortured cuts made by the tree trimmers weaken the trees, result in uneven growth, in forks in trees and in long, lanky branches that encourage the trees to split, branches and halves of trees to fall and trees to die. I support the idea that trees should be trimmed for future growth patterns; 4. Trim trees excessively. Without my supervision, IPL's tree trimmers would severely cut back trees whose branches pose no threat to IPL's power lines (including some species that don't grow tall enough to threaten the lines), and which are physically located well outside the easement for the lines I was not present a couple of times and the trees were so severely cut that I take the extraordinary measures noted above to be sure I supervise the tree trimmers. With my supervision limiting the tree trimmers, I have NOT experienced any power line problems, so the limited trimming is, indeed, sufficient for safety and protection of the power lines; 5. Do not remove the trimmed branches sufficiently. The trimmers trim so much that they invariably leave piles of cut branches and leave many branches hanging dead, from the trees around the area."

8. Dorothy Miller, Indianapolis.

"Trimmers dropped brush, leaving it for me to clean up. They also trampled flower beds near the ROW lines. Trimming techniques were questionable – i.e. short stubs."

9. Susan Fairchild, Zionsville.

"The totally unnecessary butchering of trees on Kissel Road from Lafayette Road to 96th Street (the Boone County Line) has hurt property values. Along the 96th Street area to (on the Marion County side) Cooper Road the bad job of tree "trimming" has resulted in trees dying after a year or so. The Lafayette Road corridor....is overcut and has left a beautiful tree lined road looking awful....Something must be done to protect the trees – the companies hired to chop and cut know nothing about how to do it correctly."

10. Larry Whitfield, Indianapolis.

"My property borders Dandy Trail off of 56th St. The tree trimmers topped one of my trees and cut all of the branches off leaving a pole. Tree was approximately 12 inches in diameter and was not red marked, and they basically killed the tree. I paid $75 to have the pole tree removed. They also left lots and lots of branches above that were not removed. After many phone calls they did return to clean up but it was weeks of dead branches falling to the ground before they removed the debris."

11. Mary Ellen Gadski, Indianapolis.

"You've just heard accounts of aggressive tree trimming on private property. Although I have my own personal bad experience with the trimming crews, today I would like to speak for the public trees, usually referred to as "street trees." In the four years since Mayor Peterson appointed me as a member of the Indianapolis Tree Board, I've learned a great deal about the decline of our urban forest....So how do all these facts and figures relate to IPL's tree trimming: You've heard the evidence of how extreme trimming shortens the lifespan of trees. This premature mortality is in effect robbing us all of considerable environmental benefits. Is IPL compensating us for our loss? They have a good program called Trees for Tomorrow to plant new trees, and some dedicated individuals are making sincere efforts. But this program doesn't come anywhere near close to replacing the large number of trees that we are losing....In your deliberations of utility trimming practices, I implore you to consider the value of our city's street trees and the great damages being done to our urban forest through aggressive trimming. It's not just the private property owners who deserve compensation. Your must consider the community at large."

12. Sheryl Facktor, Indianapolis.

"...My individual story is similar to so many you have undoubtedly heard or will hear today. But briefly, I was coming home one midmorning from an out of town business trip, when I was paralyzed by the sight, as I looked down our street and observed that all the parkway trees had been devastated as if by a catastrophic disaster. All our neighborhood parkway trees' canopies and limbs had been cut seemly with no regard. A truck was parked on the street in front of my home. As I drove up, I saw a tree cutting company gutting the center out of a 100 year old walnut tree with no regard for the tree's aesthetic value or its long term future viability. The contractor informed me that they were doing a 5 year tree trim as per their contract. When I demanded they stop their progress and review for me what the scope of their work was and their

authority to perform this work, I was told that I needed to speak with a supervisor; but, that the work would continue while they located the supervisor and got him to this job site. After requesting several times to no avail that they stop their work, I walked over to their unoccupied lift truck turned off the ignition and removed the key. I told the contractor my name and address and said that when their supervisor or the police arrive they could find me inside my house...."

13. Nancy Showalter, Indianapolis.

"...Since I have been referred to as the 'tree person' in Meridian-Kessler, I have received too many calls since 2001 to remember from [sad], angry and frustrated homeowners asking what can they do? Many have tried unsuccessfully to contact the reference phone number given on the letter homeowners are supposed to receive in the mail announcing that your 'contractors will be working within your neighborhood in the next few weeks....'"

14. Jacqueline Griffin.

"I'm in agreement that power lines require maintenance. I am in disagreement with the magnitude and manner it is done. I have experienced intimidation, violation of personal property."

D. Seymour Field Hearing. (Seymour Public Field Hearing Exhibit 1)

1. Barbara Allen, Columbus.

"...This summer I was gone and [Duke Energy] trimmed the tree at the side of my house. It was butchered. The center cut out clear down in the center of the trunk and limbs flinging out every which way on the side. They hadn't trimmed the [four trees] in the back yet. I called Duke Energy number on my bill. I asked them to come back and trim my tree up on the sides and that I didn't like it trimmed out the center like that and not to trim the rest of my trees in the back like that. I even called and talked to Duke Energy at Plainfield, In. It didn't do any good. They came back while I was gone and butchered the ones in the back...."

2. Bob Mackey, North Vernon.

"I think electric utilities should be required to trim or cut more trees. Many of my neighbors were out of electric service a week during Hurricane Ike last September. Most of the electric outages were tree related problems. Electric utilities are held to strict liability when it comes to anyone being injured related to trees and electric lines. Is the IURC or OUCC going to share in the tort liability of a child being injured in a tree climbing electrical accident due to delay caused by IURC rulemaking – which delayed or denied trimming or cutting of the danger tree?"

E. Merrillville Field Hearing. (Merrillville Public Field Hearing Exhibit 1)

1. Ruth Drake, Portage.

".... On 6/12/09 NIPSCO's tree trimmers (either Thompson or Townsend) out of Michigan 'butchered' my trees and trespassed on my property. The 40 yr. old pines were cut back 15 ft. from the power lines. All of the Pines were broken.... [NIPSCO personnel] has

ignored all my attempts to contact him regarding this issue and I have called and left voice mail messages...To date he has never returned my calls..."

2. Alan Diefenbach, Huntertown.

"....You already have many pictures and stories of the unsightly practice, and can see the work of the so-called professional tree trimmers wherever you drive. The problem of these unreasonable trimming practices has developed without decent oversight by either the legislature or the commissions entitled to work solutions....You end up with literally the taking of the homeowners' important assets in trees, and no one to define what is acceptable and meaningful vegetation maintenance practices. It is unfair to burden every homeowner with the defense of their property from these crews, most often subcontractors with very little concern for anything but cutting everything to the ground, which they often do if no one is there to address their concerns and stand guard...."

F. Fort Wayne Field Hearing. (Ft. Wayne Public Field Hearing Exhibit 1)

1. Alan Schmidt, Ft. Wayne.

"Having lost power 2 times last year I felt that the utilities had not done enough. Great to have ALL the trimming this year. Keep it up."

2. William Diedrichs, Ft. Wayne.

"I feel that the utility is doing a good job pruning the trees to achieve power line clearance. However, in some cases of pruning, the species of trees is not considered and an excessive amount is removed....When the slower growing trees are pruned the same as the weaker trees then I feel the pruning is excessive."

3. Cheryl Maxwell, Woodland Lakes.

"...When I came home the next Monday morning...to find my 20 yr. old giant Blue Spruce with 31/2 ft. of its top chopped off I was mortified that I had no time to consult our tree service to make any arrangements in relation to our plans for that tree....Tuesday our arborist from Maxwell Tree Service informed me less than 24 hours later that our tree's [destruction] that we could have started to regulate the growth of our tree so that we could continue to enjoy our tree for 10 plus years to come...."

G. Evansville Field Hearing. (Evansville Public Field Hearing Exhibit 1)

1. Dixie Barrett, Evansville.

"...Quite often property owners on the West side of Rosemarie Avenue are without electricity because limbs from these trees fall on electric lines and poles. If Electric Utility Management Practices would cut trees down growing in the 12 foot alley spaces and 4 foot

easement spaces it would eliminate a great deal of power outages. It has to be more costly for the Utility Company to repair lines and lose revenue from power outages. As consumers we are tired of being without electricity often because of the present Electric Utility Tree Trimming and Vegetation Management Practices. We are sure there are many more areas with this same problem."

7. Commission Discussion and Findings.

A. Policies and Practices of Jurisdictional Electric Utilities Relating To Tree Trimming.

1. Purpose of Vegetation Management. Indiana electric utilities have a duty to furnish reasonably adequate service and facilities. *See* Ind. Code §§ 8-1-2-4; 8-1.5-3-8. Vegetation management is an essential component of each utility's provision of reasonably adequate service and facilities. The record evidence in this Cause demonstrates that inadequate vegetation management can negatively impact service reliability and cause safety hazards to utility personnel, customers and citizens. To that end, Indiana electric utilities have established vegetation management programs ("VMPs") that strive to optimize the safety, reliability and efficiency of their electric service as well as the health of trees. *E.g.*, Duke Stanley Direct at 4; I&M Isaacson Direct at 3, 4; IPL Walker Direct at 5-6; Vectren Luttrell Direct at 11.

(a) Reliability. As trees, brush and other vegetation begin to grow into transmission and distribution lines, the frequency of outages increases. *E.g.*, Duke Stanley Direct at 6; IPL Cieslewicz Responsive at 4; NIPSCO Dehring Direct at 6. Many of the utilities provided evidence that trees and vegetation interfering with electric lines are the most frequent cause of both storm and non-storm outages. *E.g.*, Harrison Lett Direct at Exhibit DCL-4; IPL Wood Direct at Exhibit GSW-2; IMEA Tuttle Direct at 6; NIPSCO Exhibit TAD-2 at 6. For example, in 2008 Duke reported 2,909 tree-related outages affecting 184,213 customers, I&M reported 2,129 tree-caused outages, NIPSCO reported 846 non-storm related tree outages affecting 23,673 customers, Vectren reported 680 tree-related outages, and Anderson and Crawfordsville Electric Light & Power reported 17 tree outages causing 7,570 customer outage minutes. Duke Stanley Direct at Exhibit A-2; I&M Isaacson Direct at 30; IMEA Tuttle Direct at Exhibit IMEA 6; NIPSCO Exhibit. TAD-2 at 32; Vectren Luttrell Direct at 18. Respondents also provided evidence that electric service reliability is one of the main goals of their VMPs and that many utilities give higher priority to those circuits that have experienced the most reliability problems. The evidence shows that when utilities focus their vegetation management efforts on reliability concerns, tree-related reliability problems decrease. Finally, the evidence shows that delays in performing vegetation management work caused by lack of access to facilities or landowner concerns reduce service reliability. *E.g.*, Duke Stanley Rebuttal at 9; IMEA Tuttle Direct at 6; IPL Walker Direct 10-12; NIPSCO Exhibit TAD-2 at 3. Based on the record evidence, we find that vegetation management plays a key role in keeping lines and facilities clear of trees and brush, and helps to reduce the number of service interruptions to Indiana consumers. We find Respondents understand and have incorporated this goal into their respective VMPs. We further find that utilities must be able to respond quickly to vegetation issues before they turn into reliability problems and that utilities must not be unreasonably delayed in performing vegetation management work by burdensome regulations or a lack of access to their facilities.

(b) Safety. The record evidence also informs us that trees, brush and other vegetation growing into and around transmission and distribution lines cause

serious safety problems. While Mr. Goodman characterized concerns about safety and reliability as a "smoke screen" (Goodman Direct at 2-3), substantial evidence demonstrates otherwise. Downed power lines cause significant safety hazards including risk of fire and risk of electrocution to persons on the ground. *E.g.*, I&M Isaacson Direct at 4; IPL Eads Direct at 4; IMEA Tuttle Direct at 4. Trees growing close to power lines pose a safety risk to children climbing trees and persons climbing ladders or performing work near trees. *E.g.*, IPL Eads Direct at 5; IMEA Tuttle Direct at 4; NIPSCO Exhibit TAD-2 at 6-7. Trees that have not been properly trimmed can also cause safety concerns for utility employees working on electric lines and facilities. *E.g.*, IPL Eads Direct at 5; Vectren Luttrell Direct at. 3. Finally, the record evidence shows that electricity outages can cause safety concerns for customers including food spoilage, loss of use of medical equipment, and loss of heating or air conditioning. *E.g.*, IPL Eads Direct at 5. Because of these concerns, safety is one of the main goals of a utility's VMP. *E.g.*, Duke Stanley Direct at 4; I&M Isaacson Direct at 4; IPL Walker Direct at 10; IMEA Tuttle Direct at 4; Vectren Luttrell Direct at 3. Accordingly, the record evidence shows that vegetation management is vital to ensuring the safety of utility employees, consumers and citizens and we find that the Respondents understand and have incorporated this goal into their respective VMPs.

2. Uniform Vegetation Management Standards. The OUCC and Mr. Goodman both support the creation of uniform vegetation management practices. The record evidence substantiates that there are significant differences among the Respondents and the areas and customers they serve that must be considered in assessing any benefits and detriments of uniform statewide vegetation management rules. The prevalent species of trees in an area, the longer growing season of southern Indiana, the amount of rain, and the fertility of soil can all affect the growth of trees and the extent and frequency of tree trimming. Rural areas, heavily forested areas, sparsely populated areas, or areas of terrain where vehicle access is limited may warrant trimming to greater clearances to ensure reliable and safe service throughout the trim cycle. In weighing the proposals of the OUCC and Mr. Goodman for statewide vegetation management standards, the differing settings, localities circumstances, characteristics and current successes of the Respondents' operations must be considered.

We must also consider the standards and practices that already exist and are used by the Respondents. We note that generally the Respondents have successfully conducted vegetation management under current guidelines with relatively few customer complaints. Before embarking upon new rules for vegetation management, it is fair to evaluate whether the concerns expressed in this proceeding involve past events, have already been corrected or could be addressed without the promulgation of new mandates. For example, Mr. Goodman testified he had no problems with Vectren's tree trimming practices and he was complementary of Duke Energy Indiana's practices. As Mr. Walker explained, many of the incidents identified by customers are years old. However, many of the incidents discussed at the Field Hearings occurred more recently. The record also makes clear that tree trimming is not a one-size-fits-all process. It is based on the sciences of arboriculture and electrical engineering and practiced by the judgment of experienced workers as to how and where to make the best cuts that will protect reliable service, protect public safety, promote tree health and provide a reasonable trim cycle. We now address the elements of the proposed uniform vegetation standards.

(a) ANSI A300 and NESC. The OUCC initially recommended that ANSI A300 procedures be followed to the extent adopted or modified to the Commission's directives. However, in its reply testimony, the OUCC stated that it is not the OUCC's intent to recommend to the Commission the partial adoption or modification of the ANSI A300 standards

in any manner, but rather that "the ANSI A300 standards should be adopted in their entirety by the Commission." The OUCC also recommended Respondents comply with the NESC.

The record evidence demonstrates that Indiana electric utilities follow most, if not all, of the nationally recognized vegetation management standards, including ANSI A300, NESC, the Shigo Guide and the ISA Best Management Practices. *E.g.*, Duke Scott Direct at 8, 17, Williams Responsive at 2-3; NIPSCO Exhibit TAD-2 at 10-12, Dehring Responsive at 13; I&M Isaacson Direct at 14-15; Isaacson Responsive at 2; IPL Walker Direct at 24-25; IMEA Tuttle Direct at 11; IMPA Mayo Direct at 7; Indiana Statewide Brenner Direct at 6a; Vectren Luttrell Direct at 9. In particular, Dr. Tate found, with very few exceptions, the pruning component of IPL's vegetation management program is meeting the standards, recommendations and practices set forth in ANSI A300 and the Shigo Guide. IPL Tate Responsive at 5-6. Similarly, Respondents' responses to the Final Issues List, Issue 1c, point out that this Commission's rules, particularly 170 IAC 4-1-26(a) and General Administrative Order 2007-3, require electric facilities to be maintained and operated in accordance with NESC and other applicable safety codes.

As noted by the OUCC and by some Respondents, pruning in accordance with ANSI A300 standards does not always produce an aesthetically pleasing result for customers and many times the tree will not retain a symmetrical appearance after applying ANSI A300 standards. The OUCC and Respondents also recognized that many forestry experts and arborists agree that pruning in this manner is the best way to protect the health of the tree while maintaining the necessary clearance for power lines. As the OUCC stated, it is more important to ensure the health of the trees and maintain the integrity of power lines than it is to preserve the aesthetic qualities of a plant.

Mr. Goodman called for a ban on cuts that would remove more than 25% of a tree's crown, side cuts, "L" shaped cuts, "topping" and "V" cuts, which he claimed often exceed the ANSI A300 standards. Mr. Goodman also claimed that directional pruning is inappropriate because it can kill trees and result in unbalanced trees that may prove dangerous in the future.

Dr. Tate explained that people can and do have varying opinions about the aesthetics of the end results of directional utility pruning. However, he added that clearance gained by other methods practiced in the past (such as rounding over the crowns of trees and leaving stubs by not cutting to laterals), even though appearing to leave a more aesthetic end result, actually caused an increased decline in the trees' health. Dr. Tate also explained that directional pruning is not "butchery" and is the best choice for the ongoing health of the tree and for the electrical utility industry. Mr. Luttrell and others also disagreed with Mr. Goodman's contention that directional pruning creates a dangerous condition where an unbalanced tree may fall during a storm. For example, Dr. Tate and Mr. Cieslewicz both testified that they saw no evidence that directionally pruned trees and/or their limbs are failing and falling away from the conductors. As Dr. Tate and Mr. Isaacson explained, while topping is an unacceptable pruning practice under ANSI A300 standards, the other manners of pruning identified by Mr. Goodman (V-cuts, side-cuts and L-shaped cuts) are not contrary to ANSI A300 guidelines. The Shigo Guide identifies V-cuts and side-cuts specifically as acceptable directional pruning techniques, specifically for the purpose of providing proper line clearance while maintaining the tree's health in the best manner possible. We find that a suggestion to ban various types of cuts would be contrary to the industry guidelines and standards followed by Respondents and should accordingly be rejected.

Furthermore, the evidence demonstrates that Mr. Goodman's recommendation that a process be established to ensure trimming practices do not "violate" ANSI A300 standards is

inconsistent with the underlying purpose of ANSI A300 and would inhibit the flexibility of utilities to design a VMP that is most appropriate for each utility. Although ANSI A300 standards provide a basis for determining good practices to generally follow, they were not meant to dictate what to do in every single unique tree setting. As Mr. Luttrell and others pointed out, deciding which branch to prune and where to cut are based on many factors including the species of tree, its shape, its maturity, its health, the expected length of time before the next pruning, etc. Thus, on a case-by-case basis, utilities need to retain the discretion to conduct vegetation management in a manner that protects the reliable provision of service and gives due consideration to the health and characteristics of each tree, while considering reasonable input of the property owner and adhering to ANSI A300 guidelines. As Mr. Isaacson noted, in some instances customers request more vigorous trimming in order to avoid having a tree removed, even if it requires removal of more than the amount recommended by ANSI A300. In such instances, a rigid standard would not allow the utility to work cooperatively with property owners to provide the best solution that ensures the safest and most reliable system possible.

However, we do find merit in the concerns that ANSI A300 provides more discretion than "standard," and the extent to which the utilities are following the trimming standards. For instance, many of the photographs depict trees that have been "topped," which is clearly prohibited under ANSI A300. Further, ANSI A300 provides that trimming should not remove more than 25% of a tree's canopy except in the judgment of the arborist. As demonstrated through the public hearings, professional arborists have different opinions on whether certain pruning complied with ANSI A300, prompting one arborist to comment that if the utility's claim of compliance with ANSI A300 were true "ANSI A300 had no standards." Public's Ex. Indpls. FH-1 (Written Comments of Phillip Ping). As discussed below, we must carefully balance the interests of the property owner with those of the utilities, in order to maintain the utilities' ability to provide safe and reliable electric service.

With respect to the pruning standards themselves, substantial evidence demonstrates that ANSI A300, the Shigo Guide and the ISA Best Management Practices are the industry standards for proper tree trimming line clearance guidelines that promote long term tree health and survival. These guidelines are designed by a broad base of tree care experts with the intent of guiding trimming in a manner that promotes tree health and safely accommodates electrical facilities. Substantial evidence of record also demonstrates that Respondents are complying with the ANSI A300 standards in the course of trimming. Furthermore, the record confirms that the ANSI A300 standards support properly implemented directional pruning and that side cuts, "L" shaped cuts, "V" cuts and similar cuts are sometimes necessary and appropriate. ANSI A300 also provides that topping is an inappropriate trimming practice and that generally, no more than 25% of a tree's canopy should be removed. Accordingly, we direct Respondents to apply and adhere to the guidelines of ANSI A300, NESC, the Shigo Guide, and ISA Best Management Practices in the conduct of their vegetation management in a manner that promotes safe and reliable service and tree health, absent one of the following: consent by the property owner, during an emergency, in the interest of safety, or in the interest of preserving the life of the tree.

(b) Standard Clearances. Ms. Armstrong testified that it appears that the utilities differ in the amount of clearance they require for distribution lines. She recommended that utilities consider abandoning trimming clearances based on whether the tree species is slow, medium or fast growing and instead trim all species in the same manner. Respondents generally expressed concern that a statewide clearance standard could not

incorporate the many factors that can impact clearance requirements. For example, I&M's clearance requirements vary depending on the section of the circuit involved, giving some priority to those circuit areas that impact the greatest number of customers. I&M Isaacson Direct at 11. NIPSCO considers the type of vegetation, growth rates, physical location of the vegetation with regard to the location of the lines, pruning practices, voltage and physical location of the lines, public safety and tree health in determining clearance distances. NIPSCO Dehring Rebuttal at 4. Vectren and other Respondents testified that clearance distances are dependent upon the type of facility being maintained, the species and maturity of the tree, the location of the tree relative to the facilities, line voltage, movement of vegetation, sagging of conductors during routine wind and icing conditions, and the level of clearance necessary to keep the conductors clear throughout the trim cycle. Duke Williams Reply at 2-3; I&M Isaacson Reply at 9-10; IPL Walker Direct at 12; NIPSCO Dehring Rebuttal at 4; Vectren Luttrell Direct at 9. As Mr. Burch and others noted, tree trimming procedures used in urban settings may not all be appropriate in rugged rural terrain. Because of these factors the utility needs to retain the discretion and flexibility to manage vegetation in a manner most appropriate for each differing location and the differing circumstances they present so as to promote safe and reliable service. Simply put, a "one-size-fits-all" approach is not appropriate. Furthermore, the record demonstrates that there already are nationally recognized industry standards and best practice vegetation management standards and practices for tree trimming which the Respondents follow.

The record also establishes that the adoption of a uniform statewide minimum clearance distance would increase costs and threaten reliability. For example, using a standard urban easement or reducing line clearances in rugged terrain would substantially increase the cost to provide service and likely result in additional storm outage time. Vectren Luttrell Responsive at 3; Jackson Pritchett Direct at 10; Indiana Statewide Brenner Responsive at 1-2. Failure to consider the different needs of differing areas (e.g., rural, heavy canopy) will saddle Respondents with vegetation management practices that make little practical sense and could significantly increase rates for electric service. *E.g.*, Jackson Pritchett Direct at 10; Indiana Statewide Brenner Responsive at 1-2; Kiess Responsive at 2; IPL Walker Direct at 10-11, 39; Vectren Luttrell Responsive at 3. As noted by Mr. Isaacson, adopting a fixed 10-foot standard for distribution primary conductor lines would not guarantee that adequate reliability clearances will be achieved. Moreover, reliability could be negatively impacted by such a change. Accordingly, we do not adopt a uniform clearance requirement. Line clearances should continue to take into consideration the characteristics of the locality, the electric facility and the health of the tree, along with the other pertinent factors identified by Respondents. However, it is imperative that the utilities actually consider and apply these factors in determining the appropriate clearance for a given tree or line. The record is replete with customer complaints that strong, healthy, mature trees were trimmed as aggressively as trees posing bigger risks to reliability.

While the Commission has some concerns over the variety of clearances chosen by utilities throughout the State, we must be cautious in forcing regulatory mandates onto our utilities through an investigation that does not address all of the issues that may impact such a decision, namely costs to ratepayers. Some utilities may choose to implement uniform clearances throughout their service territories, while others may continue to address line clearance on a line by line or tree by tree basis that considers a number of different inputs.

While we do not find a mandate for uniform clearances to be appropriate, we do address certain issues relating to property rights. First and foremost, utilities must consider the clearance distance and any additional distance necessary to make an ANSI-approved cut, and upon such

consideration, determine whether the existing easement or right of way extends into a customer's property so that the utility can trim without obtaining consent from the property owner. If existing easements or rights of way are insufficient, utilities either need to obtain such additional easements as necessary from the property owner, or obtain the consent of the property owner prior to trimming vegetation outside of the easement or right of way. Second, as noted above, the ANSI standard leaves substantial judgment in the hands of the utility in determining how a tree will be trimmed. We find that if a tree would have more than 25% of its canopy removed, the utility must obtain consent from the property owner. If a property owner does not consent, and the owner and the utility are unable to mutually agree on how the tree can be trimmed to provide sufficient clearance in order to maintain reliable electric service, the utility shall consider removing the tree, at the utility's expense, as long as it has secured the requisite easements to allow its personnel onto the owner's property, or inform the customer that it will need to make non-ANSI standard cuts in order to provide clearance. [13] To the extent removal is required, the rulemaking discussed below in Paragraph 7(D) will also address a tree replacement program.

(c) Standard Trim Cycle Lengths. The OUCC supports a standardized trimming cycle that is not shorter than 3 years and not longer than 6 years. The responses to the Final Issues List, Issue 8 shows that Respondents generally have trimming cycles of 3 to 6 years; one REMC considers an 8 year cycle appropriate for conditions in its service areas. The Respondents' witnesses agreed that a "one-size-fits-all" approach to trim cycles would eliminate the flexibility and discretion utilities need to properly maintain their lines. For example, Mr. Kiess and Mr. Luttrell supported the need for flexibility in tree trimming cycle lengths because utilities have different types of vegetation, differing weather conditions and differing vegetation growth rates in their service territories. Southern Indiana enjoys spring temperatures earlier than northern Indiana and typically does not have cold temperatures or frost as early as northern Indiana; this can impact the growth of trees. The record also reflects that when storms occur and mid-cycle tree trimming is required, the utility must be able to revise its tree-trim cycle. Noting that each customer receives electricity from only one utility, Mr. Kiess and Mr. Isaacson questioned how standardizing trim cycle lengths will help customers to understand the cycle for their own provider.

Substantial record evidence shows that Respondents have appropriately developed VMPs so as to allow the utilities to: (a) provide reasonably adequate service; (b) prioritize those circuits that affect the most customers or have historically experienced the most outages; (c) work within the budgeting process; (d) deviate from scheduled trim cycle if conditions require sooner trimming; and (e) access facilities in emergencies. *E.g.*, Duke Stanley Direct at 8; Harrison Lett Direct at 2; I&M Isaacson Direct at 8, 14, 26; IPL Walker Direct at 4, NIPSCO Exhibit TAD-2 at 7; Wabash Valley Stein Direct at 7. Accordingly, we find that there is no need at this time to standardize trimming cycles throughout Indiana. However, the trimming cycle that a utility chooses to implement should be better explained to ratepayers to increase the understanding about how the chosen trim cycle impacts clearance distance and the extent to which a tree's appearance will be impacted based upon that chosen cycle.

[13] Our requirement here is not intended to restrict a municipality from adopting more stringent standards to address street trees located within rights of way or trees generally within the municipal limits.

(d) Additional Panel of Experts. Respondents unanimously disagreed with Mr. Goodman's recommendation that a panel of outside experts should be assembled to establish necessary safety clearances for all lines up to 200 kV. National standards already exist (e.g. NESC, OSHA, ANSI A300, FAC-003) and these standards have been developed (and are routinely updated) by a "panel of experts" representing a diverse set of backgrounds. As noted by Mr. Cieslewicz, any new standards would replicate standards and requirements that already exist and are being followed by Respondents. We find that the existing industry clearance standards are reasonable, and there is no reason for prescribing any additional, uniform, statewide vegetation management standards. We also find that because of multiple differences in topography, seasonal conditions and accompanying growth patterns of different species of trees, application of additional standards in these areas is not practicable or appropriate. Accordingly, we find there is no need to assemble a panel of outside experts to establish necessary safety clearances for all lines up to 200 kV.

3. Notice Requirements. The OUCC recommended that the Commission establish customer notification requirements that should include some form of the following: notification in electric bill two consecutive months before trimming; individual mailing one month before trimming; in-person notification by company, or door hanger left if customer is not home, one week before trimming; and upon request, the utility should schedule trimming at a time convenient to both the utility and consumer. In addition, Ms. Armstrong believes the utility should be able to pinpoint for the consumer, within a four-hour window, when to expect trimming to occur.

While Ms. Armstrong acknowledged that tree trimming complaints make up a relatively small percentage of all utility consumer complaints, she also testified that the most common comment the OUCC received in this investigation from consumers was that the utility provided little or no notice before showing up to trim. In Ms. Armstrong's view, notifying customers of pruning activities ahead of time can provide ample time for the customer to contact the utility, ask utility staff questions, and potentially solve any disputes prior to any work taking place.

Mr. Goodman argued that a uniform notification process, modeled after Project Cooperation, should be adopted. He suggested two notification amendments: (1) a prior visit to each homeowner to discuss and plan the proposed trimming; and (2) the actual day and time trimming is planned.

As Ms. Armstrong acknowledged and as shown by the responses to the Final Issues List, Issue 5b, the Respondents use some combination of door hangers, letters and when possible personal face-to-face customer notice. The notices to customers generally provide contact information. While Respondents noted that most customers do not want to spend their time discussing tree trimming and are willing to entrust the Respondents with the job in order to obtain reliable electrical service, public comments indicate that many customers are concerned about how their trees will be trimmed and would prefer to have direct contact with someone from the utility to address concerns.

We agree that the OUCC's notice recommendations are overly prescriptive and go beyond what is often done in the industry and what is needed. The two month electric bill notification proposal may not be practical, as schedules can change due to circuit maintenance priority, budgets, storms, and personnel demands. In addition, the record indicates that many customers tend not to focus on, or to simply discard, supplemental information included with the monthly bills. It was also explained that utility billing systems are generally not set up to include

such information and that it would be costly to modify them in order to advise a limited number of customers that trimming will occur in their area within a set time. As Mr. Williams testified, requiring individual customer mailings in a large service area would be a time consuming and costly venture. As Mr. Tuttle explained, smaller utilities lack the resources for the suggested multiple notice forms, and individual mailing is not needed when personal customer contact is also made.

There are many unanticipated variables that impact schedules, including storms, employee illness, equipment failures, an area simply taking more time than expected, or a crew being pulled off an area temporarily to deal with a more urgent tree problem.

In order to provide customers fair notice and provide them the opportunity to ask questions and understand the importance of cooperation with tree trimming, we find that a utility should provide notice to a customer in person or over the phone, and at least one form of written notice to the customer. These initial notices should occur at least two weeks before the trimming is estimated to occur. We further find that notices shall provide the customers with the appropriate contact information. It is incumbent upon the utility to return customer phone calls, answer questions, and respond to concerns. We recognize that this notice requirement need not apply where there is no residence on a particular property, where the utility has a written easement that expressly gives the utility the right to trim trees or conduct vegetation management activities, or during an emergency or storm event. We also find that in those instances when a customer inquires when trimming is expected to occur on their property, the utility or its representative should explain that a specific time cannot be guaranteed but should give its best estimate. If the customer requests a more specific time, the supervisor shall endeavor to work with the customer to give a precise time. In that manner, those customers who want to be present during tree trimming will be given appropriate notice and a reasonable opportunity to do so in order to address any issues (on site if necessary) with personnel from the utility. While these general notice requirements should be implemented within 30 days of the date of this Order, specifics for these types of contacts will be addressed through the rulemaking discussed in Paragraph 7(D), below.

As utilities impose additional clearances for utility lines, and by necessity, further intrusion into a customer's property, utilities must recognize that this expansion comes with increased responsibility to respond to customer concerns and alert customers to the times when vegetative management will occur. Generally, the electric IOUs have large-scale VMPs that involve a work plan that sets forth the basis for the trimming to occur over some period, and a work planner who is charged with implementing that process. It appears from our review of the record that many of the disputes between property owners and utilities involved a breakdown of that process, whether through lack of adequate training or lack of supervision. Through the rulemaking initiated by this investigation, the Commission anticipates that by making customers more aware of the process and by providing contact information with the individuals responsible for the process, those customers who have concerns about trimming on their property will be better able to resolve those concerns prior to the arrival of the tree trimming crews.

4. Dispute Resolution. Ms. Armstrong suggested the Commission create a "dispute resolution process for consumers to appeal a utility's vegetation management practices." Mr. Goodman recommended the Commission impose uniform step-by-step procedures to be followed whenever a customer disagrees with the planned trimming.

The record evidence shows that each Respondent has already established a process for

addressing customer complaints regarding tree trimming. *E.g.*, Duke Stanley Direct at 9-10; I&M Isaacson Direct at 17, 19; IPL Walker Direct at 28, 31-32; NIPSCO Exhibit TAD-2 at 16, 19; NREMC Kiess Direct at 7, also Exhibit GLK-4; Vectren Luttrell Direct at 11-12; Wabash Valley Stein Direct at 6-7, also Exhibit A. The REMCs and municipal electric utilities noted that in addition to dispute resolution processes, their members and customers have the opportunity to take their vegetation management concerns directly to the board of directors (in the case of the REMCs) or to municipal government officials. IMEA Tuttle Direct at 18; Indiana Statewide Brenner Direct at 9, Kiess Responsive at 6. In addition, customers of REMCs and municipal electric utilities have the privilege of voting for the board of directors and government officials that oversee their electric utility. IMEA Tuttle Direct at 18; Indiana Statewide Brenner Direct at 9.

Respondents opposed the creation of an additional dispute resolution process. They point out that customers currently can complain to the OUCC and the Commission's Consumer Affairs Division about this area of utility operations just as they can regarding any other area of utility operations. Even the Commission's user-friendly website facilitates customer complaints. The Commission also has formal complaint processes and property owners may also avail themselves of whatever right to recourse may be available to them under Indiana law. We also wish to emphasize that this Commission expects utilities to help customers understand the critical importance of tree trimming and in good faith work with customers to address their concerns and reasonably resolve them at the field or company level promptly whenever reasonably possible.

The Commission finds that dispute resolution should be included in the rulemaking proposed below in Paragraph 7(D). However, the Commission's authority to properly address disputes is limited by the authority given by statute. The Commission does not have fining authority, and as addressed in Cause No. 38706 FAC 80 S1, the customer cannot be made whole under the current statutory scheme absent authority to levy fines against utilities for actions that are detrimental to the ratepayer.[14] Further, the Commission is not the proper forum for customers to raise constitutional claims related to property rights. While the Commission's Consumer Affairs Division can provide assistance to customers, the Commission is concerned that such assistance would be after the fact, which in many cases will be of little comfort to the consumer. Accordingly, in large part, disputes over tree trimming must be addressed at the utility level with a process that insures the appropriate utility personnel are involved and the issues resolved prior to irreparable trimming.

5. Notice of Upgrading of Distribution or Transmission Lines. The OUCC recommended that if a utility changes a distribution or transmission line to a higher voltage level, and its action results in a change to the affected right-of-way, then the utility should notify affected property owners and have appropriate dispute resolution processes in place for consumers impacted by such changes.

Respondents generally disagreed with the OUCC's proposal because the upgrading rarely occurs. They also noted that such facilities are placed either in the public right-of-way or in transmission easements and are governed by right-of-way regulations or the terms of the easement. Respondents also confirmed that when upgrades are undertaken, they acquire additional easements.

[14] The FAC 80 subdockets involved recovery of $8.2 million by the consumer parties to be refunded through NIPSCO's FAC. While a majority of the $8.2 million dollar common fund was refunded to ratepayers, 12% of the fund was awarded to the consumer parties for attorney fees.

Higher line voltages may change the clearances the utility requires, which could potentially impact the extent of vegetation management that may need to occur. Accordingly, while the customer would receive notice in connection with the acquisition of any additional easement, we find that even if additional easements are not required, utilities should notify property owners of line upgrades. This notice shall also be considered in the rulemaking proposed below in Paragraph 7(D).

6. Debris Removal. The OUCC recommended that tree trimming debris left behind by utility tree trimming crews should be removed in a timely manner by the utility. In most cases the OUCC believes that a timely removal of tree trimming should occur within a week or a few days of trimming.

Respondents generally agreed that there is a need for timely removal of debris associated with routine maintenance. For example, Mr. Walker testified that IPL's procedures require debris resulting from routine vegetation management to be removed within 48 hours and not to be left behind over a weekend or holiday. Moreover, the contractor must pay a penalty for incomplete debris removal. Other utilities described similar procedures governing the removal of debris associated with planned tree trimming work. Because of dissimilar situations, Respondents opposed the establishment of a hard and fast rule that would require removal within a required time frame. Respondents also explained that a mandate that constrains a utility's operations to require the debris to be removed within less than one week under all circumstances would unreasonably increase the cost of vegetation management. Respondents also testified that if a storm event occurred, power restoration efforts and associated vegetation management must take priority over strict compliance with any mandate regarding the removal of routine vegetation management debris. The Commission finds that debris associated with routine maintenance, in a maintained area, should be removed in a timely manner. Generally, absent intervening inclement weather that may pull crews from maintenance activities, it is reasonable to expect normal maintenance trimming debris will be promptly removed within three calendar days.

The OUCC also indicated that it may be appropriate to require utilities to remove trimming debris that is created during storm restoration efforts created by the utility, once power restoration efforts are completed. Respondents unanimously disagreed with the OUCC's proposal. Respondents explained that it would be unduly burdensome, impractical and would significantly increase their costs if they were required to remove debris resulting from storms. They also explained that when a storm or other weather conditions cause tree damage, that tree damage is the result of an Act of God and the property owner is responsible for pruning away and removing the damaged trees. They also explained that it would be virtually impossible to prove what debris was "caused by the utility" and what debris was not. We also note that most municipalities provide for regular trash removal. Furthermore, the record also reflects that municipalities can and do make special arrangements to remove debris associated with significant storms.

When tree damage also causes a power interruption or outage, the tree pruning or removal that the utility does is performed so that power may be restored in a timely manner. In this situation, utilities generally do not remove tree debris created by power restoration practice. All of the Respondents follow this general practice. Mr. Cieslewicz explained that during typical storms, many tree-related outages are caused by loss of an entire tree. However, he stated that it is not the utility's responsibility to clean up the debris following this type of event. Mr. Cieslewicz also explained that in the overwhelming majority of cases, the only tree work that is

performed during a storm or emergency is tied directly to the necessity of restoring power (putting the wires back up). It is not routine work. Finally, Mr. Cieslewicz noted the utilities did not plant the trees, they for the most part do not own the trees, and their facilities are not growing towards the trees. He stated that the problem is that other people's trees are threatening the delivery of safe and reliable power.

The Commission views standard trimming practices differently from restoration of service following storm damage. Utilities, and ultimately ratepayers, should not have to pay for the cost of vegetation removal necessitated by storm damage. In attempting to outline the rights of property owners with respect to vegetation management, property owners also have responsibilities as part of that ownership. Storm damage that does not impact utility service is undeniably the responsibility of the property owner. There is no reason to shift that responsibility to a utility merely because the storm damage causes an outage. Utilities should focus on providing service, and when impacted by storms, restoring service. Accordingly, we find that it is not appropriate to require the removal of storm-related debris. It is reasonable for the property owners to remain responsible for such debris and for utilities to remain responsible for debris resulting only from routine vegetation management. Thus, we find that utilities should not be required to clear debris caused by storms and other natural occurrences such as tree failures.

7. Burying Lines. Mr. Goodman testified that greater consideration or weight should be given to burying a line versus years of tree trimming and maintenance. He argues that while short term costs are most likely higher, the long term costs should far offset the initial cost. Respondents objected to any requirement that lines be buried and testified that Mr. Goodman fails to comprehend the extremely high financial cost of burying lines, maintaining buried lines, accommodating existing above and below ground facilities as well as the extensive adverse impact that burying lines would inflict on tree root structures. Moreover, burying existing lines would actually disrupt, if not cause, the removal of significant amounts of existing trees or vegetation. We agree that burying existing overhead facilities is complex and problematic due to existing and mature infrastructure already in place, including streets, sidewalks, sewers, water lines, and outbuildings. Service restoration could be delayed due to the difficulty of locating service failures when lines are buried. The record also reflects that buried facilities have their own set of below ground maintenance issues. Substantial record evidence demonstrates and we find that it would be extremely expensive to mandate the burying of existing lines and doing so would unnecessarily increase costs ultimately borne by all customers, in addition to the impacts on existing infrastructure, as well as trees and other vegetation. Therefore, we decline to impose requirements regarding the use of buried or overhead electric lines in this Cause.

8. Trimming by Customers. Mr. Goodman testified that utilities should allow landowners to trim their own trees when requested. Respondents opposed Mr. Goodman's self trim recommendation. Mr. Stanley testified that Duke Energy Indiana does not allow customers to assume responsibility for tree trimming around or near its energized conductors because there are significant safety, reliability, and liability issues. He testified that allowing customers to assume responsibility for power line maintenance and vegetation management presents real safety concerns, places all customers at greater risk of outages and could compromise the utility's ability to provide reliable electric service. He also noted that with self-initiated tree trimming near energized power lines, there is the potential for customers themselves (or unqualified workers hired by customers) to cause injury or even death, or damage

to utility facilities. Mr. Stanley further observed that if it were to allow customers to assume responsibility for tree trimming, aside from doing follow-up visual inspections, the utility has no assurance that the work will be performed in a timely and satisfactory manner, or that the contractor will follow ANSI A300 or other industry standards. He also testified that keeping track of which customers have opted to be responsible for trimming and monitoring changes in property ownership creates additional logistical challenges.

Mr. Luttrell echoed these remarks. He also noted that as property owners change over time, the self-trim frequency may no longer be maintained, even though the best method to ensure the overall reliability and safety of the electric system is to trim trees appropriately to meet the utility's trim cycle. Mr. Luttrell also testified that the safety of the private tree trimmers must be considered, as they will be working around very hazardous facilities. He concluded that this work is best left to the utilities, and their professional crews and utilities should not be required to accept, or police, self pruning as a mandatory substitute for normal utility tree trimming.

The record reflects that IPL tried a limited self-trim option for distribution lines up to 13.2 kV. Multiple issues became apparent. For example, if a tree located too close to the power lines is readily climbable and adjacent to a school, a self-trim contract would not be a viable option because it could create a public safety threat. In addition, IPL's option was limited to lines up to 13.2 kV. As Mr. Walker explained, the hazardous nature of the pruning activity increases with voltage above this level. Furthermore, lines on the bulk electric system do not feed individual residential customers. Rather, they feed substations and larger customers. Outages on lines that are part of the bulk electric system impact a larger number of customers than other lines. As explained by Mr. Walker, after further consideration of the pros and cons of the self-trim option, including consideration of factors such as those discussed by other witnesses, IPL decided to discontinue the self-trim option. Therefore, it is not advisable to allow customers to perform maintenance of these lines.

We find that utilities should not be required to allow landowners to self-trim trees. Any potential benefits associated with self-trimming are far outweighed by the potential harm that has been identified by the Respondents. We also find that the overall public interest in maintaining reliable electric service requires that the responsibility for tree trimming should remain with the utilities.

9. Annual Reporting Requirements. The OUCC recommended that utilities provide information on an annual basis to the Commission regarding vegetation management. Such information should include the utility's vegetation management budget and actual expenditures for the year, the number of customer complaints related to tree trimming and the manner in which those complaints were addressed or resolved, and the percentage of tree-related outages. Respondents opposed the additional reporting requirements because such additional requirements will increase the cost of doing business without demonstrating any added value to the Commission or to ratepayers. It was also noted that implementing this recommendation would be burdensome for smaller jurisdictional utilities that do not have additional personnel who can be dedicated to tracking and reporting such information on an annual basis. Respondents also questioned what benefit would be gained by filing reports when weighed against the time and cost to prepare the filings. As Mr. Wood pointed out, electric service reliability is already reported to the Commission in accordance with the Commission's rules at 170 IAC 4.1-23. Furthermore, the OUCC testified that tree trimming complaints made

up a relatively small percentage of all utility consumer complaints received by the OUCC over the past three years. Many Respondents have few if any tree trimming customer complaints.

Utilities already file annual outage reports with the Commission, but these reports do not separately indicate information concerning tree-related outages. We find that utilities shall file a separate report by March 31, under this Cause, which outlines the utility's vegetation management budget and actual expenditures for the prior calendar year; the number of customer complaints related to tree trimming and the manner in which those complaints were addressed or resolved; and the tree-related outages as a percentage of total outages. Utilities shall also file their VMP with the Commission, and any changes to that plan going forward.

10. Customer Education. The OUCC suggested that customers should be educated as to their responsibilities and rights regarding tree trimming. Ms. Armstrong recommended public outreach in preventing trees from being planted in public rights-of-way and acknowledged the "Right Tree Right Place" program as an example of how utilities can educate customers on tree planting. She testified that prudently-incurred customer education expenses should be recovered in rates. Mr. Goodman testified that great strides have been made in educating customers on tree selection and placement. He opined that the vast majority of concerns expressed in this proceeding could have been avoided with better communication and greater effort must be made "to create an atmosphere where each party views the other as [its] partner." He suggested the OUCC and the Commission supervise the development of customer education relating to rights, obligations and tree selection and placement.

The Respondents generally agree that customer education, as to the need for and importance of, tree trimming is important, as is teaching the practice of planting the right tree in the right place. The record demonstrates that the Respondents already take customer education on tree trimming very seriously. Moreover, Respondents assert educational efforts are already commonplace and a new rule is not necessary to accomplish this goal.

The Commission believes the best path to maximum customer tree trimming cooperation and minimization of customer concern is through continued and focused customer education. Such education should focus on several areas. The "Right Tree Right Place" program is an excellent educational tool focusing on tree selection and placement, as well as a general understanding of the avoidance of tree conductor contact. Customers should also continue to be educated on the public importance of tree trimming to avoid service interruptions, injuries and fatalities. It is appropriate that customer education emphasize the need for, and benefit of, preventing tree contact with power lines, and the importance of cooperation between customers and their utility in accomplishing the essential public task of power line maintenance. Tree trimming typically occurs in proximity to customers' homes. The best way to assuage any customer concerns is to help customers to understand the critical importance of the public service of trimming trees to protect electric service reliability, and to avoid injuries and fatalities from electrocution.

The Commission finds it is important that Respondents continue their efforts at customer education on the need for and cooperative support of tree trimming and proper tree placement. The rulemaking discussed in Paragraph 7(D) below will address the importance of customer education in this area, and build upon Respondents' current educational efforts.

B. Municipal Electric Utility Tree Trimming Practices. Based on the record evidence in this Cause, the Commission specifically declines to adopt rules relating to municipal

electric utility tree trimming practices. The Commission's statutory authority "does not include the power to initiate and impose Commission rules on municipal utilities,"[15] and we have heard evidence that it is unnecessary to do so. Municipal electric utilities are overseen by the municipal government, including generally the Mayor of the City (or Town Manager of a Town) and the municipal legislative body. In addition, under Ind. Code § 8-1.5-3-3, control over the operations of a municipal utility is vested in a board (typically, a utility service board), comprised of residents of the municipality. The manner in which municipal electric utilities trim trees may be, and often is, governed by an ordinance adopted by the municipal legislative body, with input from the utility service board and citizens of the municipality. IMEA Tuttle Direct at 18. The evidence shows that some cities with municipal electric utilities have adopted local Ordinances dealing with the subject of tree trimming. Those Ordinances have the effect of law and could come into conflict with any rules that we might try to impose through this investigation.

The record evidence further reflects that when tree trimming issues arise in a municipal electric utility's assigned service area, customers have the ability to address their concerns directly to the electric utility superintendent, a member of the utility service board, a council member, or the Mayor/Town Manager. Of the hundreds of comments the Commission has received and reviewed, only one comment was submitted by a customer of a municipal utility, who explained how he and the superintendent of the utility worked together to resolve a tree trimming issue. Due to the relatively small size of their assigned service areas, municipal electric utility personnel are likely to have direct, personal contract with customers prior to trimming trees. *Id.* at 13; and IMEA Tuttle Rebuttal at 8. The evidence further reflects that municipal electric utilities respond promptly to issues once trimming begins, and work to resolve customer concerns quickly and amicably. *Id.* Mr. Goodman recognized that IMEA witness "Mr. Tuttle's remarks describe a different, more customer friendly atmosphere [in municipal electric utility service areas]." Goodman Rebuttal at 27. Accordingly, even if we were to initiate new rules in this proceeding relating to tree trimming practices, we do not believe imposing those rules on municipal electric utilities would be necessary or appropriate.

C. Appeal Related to IPL's Tariff. On December 10, 2009, the Presiding Officers issued a Docket Entry suspending a portion of IPL's tariff language related to tree trimming. On December 18, 2009, IPL filed its Verified Appeal to the full Commission.

In the Commission's 2009 Summer Capacity Survey, IPL was the only Indiana utility that presented a tariff provision directly related to tree trimming. Section 15 of IPL's Rules and Regulations is a Right-of-Way Section, which states:

> The Company shall have the right to install, construct and maintain such poles, wires, fixtures and other equipment (overhead and underground) on Customer's property or on easements or public right-of-way adjacent to Customer's property and shall have the right to maintain such poles, wires, fixtures and other equipment *including the right to trim and remove trees located on Customer's property, as, in the Company's judgment are reasonably necessary to the operation and maintenance of such facilities.* (Emphasis added.)

[15] *Cities & Towns of Anderson, et al. v. Public Serv. Comm'n*, 397 N.E.2d 303, 309 (Ind. Ct. App. 1979).

In reviewing other Indiana utilities' tariffs, we find no language remotely similar. Indiana electric utilities have a duty to furnish reasonably adequate service and facilities. *See* Ind. Code §§ 8-1-2-4, 8-1.5-3-8. To furnish reasonably adequate service and facilities, electric utilities rely on public rights-of-way, and easements of all types. As we stated in our December 10, 2009 docket entry, "...While the statute requires that public utilities provide 'reasonably adequate service,' that section does not grant public utilities any particular authority to carry out its statutory obligation. Instead, public utilities are authorized to charge 'reasonable and just' rates in order to provide 'reasonably adequate service.'" The Commission heard nothing in the evidentiary hearing which might justify a tariff such as IPL's. In fact, other utilities have exhibited the ability to perform its tree trimming obligations without the benefit of a tariff which authorizes the utility to "trim and remove trees located on Customer's property". During cross examination, DEI's witness Gary Williams testified as follows:

Q: ...Does Duke always acquire an easement?
A: An easement for line clearing vegetation?
Q: Yes.
A: Yes.
Q: Does Duke use eminent domain to acquire that easement?
A: No, we haven't done that.
Q: Does Duke acquire the easement by prescription or by purchase of the easement from the customer?
A: It could be both; normally by purchasing.

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Q: So, the 10 foot minimum cut, that is made regardless of whether the – regardless of where the boundary of the right-of-way is; is that correct?
A: No. We make all –We make sure that all our cuts are inside of our right-of-way. If we get off the right-of-way, we want to get the customer's consent.

Transcript at pp. J-67, 68, 73.

The fact that IPL has raised the issue of costs of obtaining additional easements in the absence of its perceived authority under its tariff provision suggests that IPL does not have the easements it is required to have in order to conduct its VMP in accordance with its clearance standards and ANSI A300. As a creature of statute, the Commission can only grant a utility what it has been authorized to do by the General Assembly. There is no statutory authorization that provides the Commission the ability to allow a utility to do what IPL's tariff provision purportedly allows.

Generally, the Commission, through its Utility Divisions, approves utility rules and tariffs. The IPL Tariff at issue was approved by the Commission in Cause 34363 (Dec. 22, 1976). While the Order did approve the rules and tariffs as proposed, the Order was silent on tariffs and rules generally, and the tariff language at issue here specifically. Typically, when a utility obtains rate relief, it files a proposed tariff, for approval by the appropriate utility division, and this proposed tariff indicates how it will implement the Commission's Order in its rates. To the extent that utility tariffs include other terms that were not directly addressed in an order, it is appropriate for the Commission's utility divisions to conduct periodic reviews, whether based on customer complaints or sua sponte, to confirm whether non-rate related tariff language is

consistent with applicable Commission rules and Indiana law. Accordingly, while the Presiding Officers ordered IPL to cease utilizing its purported tariff authority, as part of the review conducted in this Cause, such a directive could have come from the Director of the Electric Division as part of the Commission divisions' duties of approving tariffs.

Again, as stated in the December 10, 2009 docket entry, "...it does not appear that such a provision is necessary for public utilities to provide electric service. Moreover, Section 15.2, as written, appears to be without authority granted by statute or Commission rule." We hereby affirm the Presiding Officers' December 10, 2009 ruling, and find that the above-referenced italicized text shall be permanently redacted from IPL's tariff. IPL shall file a revised tariff page for approval by the Electric Division within five business days of this Order.

D. Rulemaking. As discussed above, the Commission finds that customer education, notification, tree replacement, and dispute resolution are all issues that would benefit from a Commission rulemaking. Initially, the Commission finds that the rulemaking shall be applicable to electric investor-owned utilities ("IOUs"), which provide electric service to a majority of Indiana customers. While we would encourage municipal and REMC utilities to participate in the rulemaking, we are cognizant of the cost concerns related to these smaller utilities, and further note that the REMCs and municipal utilities are structured in a manner that provides additional opportunities for customers to interact and voice concerns with those utilities not generally available from an electric IOU. The Commission will work closely with the Utility Consumer Counselor, the public, and the utilities to craft rules that are fair, reasonable and in the public interest. The Commission strongly encourages active public participation. The end result of the rulemaking should be the development of a code of conduct tailored for each utility similar to that which IPL has endeavored to create through Project Cooperation.

The Commission will conduct a technical conference to initiate the rulemaking process on December 15, 2010 at 2:30 p.m. E.S.T. in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana. The technical conference is open to the public.

E. Complaint in Cause No. 43650. Prior to our initiation of this investigation, Mr. Goodman filed a complaint alleging several issues related to IPL tree trimming. In this investigation, the Commission has addressed IPL's tariff language and a number of related matters involving utility VMPs. One of the remaining issues in Mr. Goodman's complaint appears to seek a determination of damages or compensation due to constitutional takings, which is outside of the Commission's jurisdiction to address. The appropriate venue for this issue is the trial court, and Mr. Goodman has a companion case filed with the Marion County Circuit Court in Cause No. 49D11-0903PL-011909. This issue is appropriately left to the trial court, and the Commission will order the complaint filed under Cause No. 43650 to be dismissed by separate order under that Cause.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Respondents shall trim, cut and remove trees and vegetation to maintain proper utility facility clearances consistent with the terms of this Order.

2. The Commission will conduct a public technical conference to initiate the rulemaking process on December 15, 2010 at 2:30 p.m. E.S.T. in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana.

3. Within five days of the effective date of this Order, IPL shall file a revised tariff page as set forth herein.

4. This investigation shall be and hereby is closed.

5. This Order shall be effective on and after the date of its approval.

ATTERHOLT, LANDIS AND ZIEGNER CONCUR; MAYS NOT PARTICIPATING:

APPROVED: NOV 3 0 2010

I hereby certify that the above is a true and correct copy of the Order as approved.

Brenda A. Howe

Brenda A. Howe
Secretary to the Commission