

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

<p>IN RE:</p> <p>FILING OF LINE AND POLE REPLACEMENT DATA [199 IAC 20.18(7) AND 25.3(3)]</p>	<p>DOCKET NO. RMU-06-10</p>
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ORDER ADOPTING AMENDMENTS

(Issued June 14, 2007)

PROCEDURAL BACKGROUND

Pursuant to the authority of Iowa Code §§ 17A.4, 476.2, 476.32, and 478.13, the Utilities Board (Board) is adopting amendments to 199 IAC 20.18(7), 25.3(1), 25.3(3), and 25.3(4) as described in the "Adopted and Filed" notice attached hereto and incorporated herein by reference. A "Notice of Intended Action" with the proposed amendments was published in IAB Vol. XXIX, No. 13 (12/20/06) p. 857, as ARC 5612B.

In the "Notice of Intended Action," the Board proposed amendments to subrule 20.18(7) to require rate-regulated utilities with more than 50,000 Iowa retail customers to include information about the replacement of lines and poles in their annual reliability reports and to subrule 25.3(3) to require all utilities to include pole inspections in their inspection plans. Editorial amendments were proposed to subrules 25.3(1) and 25.3(4).

MidAmerican Energy Company (MidAmerican), Interstate Power and Light Company (IPL), the Consumer Advocate Division of the Department of Justice (Consumer Advocate), the Iowa Association of Electric Cooperatives (IAEC), and the Iowa Association of Municipal Utilities (IAMU) filed initial comments. On February 7, 2007, an oral presentation was held to receive oral comments and allow the Board to ask questions about the comments. On February 9, 2007, the Board issued an order requesting that MidAmerican, IPL, IAEC, and IAMU file estimates of any additional costs associated with the proposed amendments. IPL, MidAmerican, IAEC, and IAMU filed responses to the Board's order on various dates.

Based upon the comments, the Board has made revisions to the proposed amendments. A summary of the comments and the revisions adopted are provided below.

SUMMARY OF COMMENTS

1. Proposed new paragraph 199 IAC 20.18(7)"i"

- i. The annual reliability report shall include:
 - (1) the number of miles of lines replaced by location, by voltage, and classified as overhead or underground; and
 - (2) the number of poles inspected, the number rejected, and the number replaced.

The Board proposed the reporting requirements in new paragraph 20.18(7)"i" to help verify whether the larger utilities are replacing lines and poles on a systematic basis to prevent any breach in the reliability of the utility's electric system. The rule as proposed would have required that annual reports include data on line and pole

replacements. The intent is for the Board to obtain sufficient information to ensure the larger utilities are maintaining their electric lines and poles so that the reliability of the system is protected.

Current rules require that the annual reliability reports filed by rate-regulated utilities include information on maintenance budgets and expenditures. The cost data must include separately stated distribution and transmission expenditures for each operating area. There is no requirement in the current rules that the report include a breakdown of the expenses for pole replacement, vegetation management, and underground replacements that would permit tracking of pole inspections and replacements or of line replacements or rebuilds for other reasons.

IAEC

IAEC did not file initial comments on the proposed new paragraph since none of its member utilities have more than 50,000 members. At the hearing, IAEC opposed IPL's suggestion that the requirements in the new paragraph apply to all utilities regardless of size. IAEC argued that the administrative costs for small utilities could be prohibitive and that the Board did not include small utilities when 199 IAC 20.18(7) was adopted because the information would not provide consistent data because of the small number of lines and poles involved.

IAMU

IAMU indicated that none of its municipal electric utilities had over 50,000 customers so IAMU did not comment on the proposed paragraph. IAMU did not appear at the hearing.

IPL

IPL indicated that it could provide information in the reliability report to include the number of miles replaced by location (operating zone), voltage, and whether the replacement was underground or overhead. IPL indicated that it could also provide information on the inspection program to include the number of poles inspected, the number rejected, and the number replaced. IPL's current inspection process will provide the information on circuits that have a relatively large number of reject structures to allow for rebuild of an area rather than partial pole replacement. Projects identified through this process are placed on the five-year work plan.

IPL contended that the reporting requirements in the proposed new paragraph should be applied to all utilities, not just those with over 50,000 customers. IPL asserted that this proposed amendment places investor-owned utilities at a competitive cost disadvantage to those utilities in the state that are not required to undertake these activities.

At the hearing, IPL again stated that it could be put at a competitive disadvantage for economic development if it had stricter or more burdensome requirements than the smaller municipal and electric cooperative utilities. IPL pointed out that the cost of the reporting requirements in the new paragraph should not be an administrative burden for a small utility since the utility was only being required to provide the number of poles being replaced. Collecting and reporting this information should not be difficult or cost-prohibitive. IPL indicated in additional comments that

the new reporting requirements would not require significant additional costs since it was only a reporting requirement.

MidAmerican

MidAmerican proposed to provide the information required in new paragraph 20.18(7)"i" using the number of conductor-miles replaced or "reconducted." While replacement of distribution circuits may involve replacing or reconducting a large, contiguous part of the circuit, it is more likely that small, non-contiguous sections, or even individual phases, will be involved. Transmission circuit replacement data would also be available on a conductor-mile basis. Therefore, MidAmerican asserted that reporting on a conductor-mile basis would be appropriate.

MidAmerican stated that the information required by the proposed amendment would be generated by its work management and mapping systems. Tracking and compiling the requested data would require modifications to the existing systems. MidAmerican estimated the required modifications could not be completed until year-end 2007 and therefore the requested data would be available starting with calendar year 2008.

MidAmerican proposed to report the requested data by distribution voltage levels (4 kV and 12-13 kV operating voltages) and transmission voltage levels (34.5 kV and higher operating voltages) and by operating area. MidAmerican suggested this would make the proposed requirements consistent with the existing requirements for the reporting of line mileage data by voltage in the annual reliability report.

MidAmerican suggested the following changes to the proposed new paragraph:

i. The annual reliability report, starting with the reliability report for calendar year 2008, shall include:

(1) the number of miles of lines conductor miles replaced or reconducted by ~~replaced by location~~, operating area at the distribution level (4kV and 12-13 kV operating voltages) and transmission level (34.5 kV and higher operating voltages) ~~by voltage~~, and classified as overhead or underground; and

(2) the number of poles inspected, the number rejected, and the number replaced.

At the hearing, MidAmerican was questioned about its suggested changes. MidAmerican stated that it proposed reporting in smaller increments than "miles of lines" since it usually made smaller repairs and wanted to avoid duplication of information being reported. MidAmerican stated that it felt it could be confusing trying to report the number of miles replaced rather than the number of conductor miles replaced. MidAmerican explained that when it does a reconductor job, it might replace the poles, and when it replaces a pole, it might replace the conductor. MidAmerican felt it needed to separate those two activities to keep the data straight. MidAmerican suggested that it could track the footage of conductor that is replaced on a particular job, however, to track jobs that may replace poles or conductors, it is going to have duplicate information on the work orders. This duplication would require more work to pull out the information and report it separately.

MidAmerican indicated that its comments were an attempt to figure out how to report on the smaller-type work. MidAmerican stated that it had larger construction

projects and would report on them as well. Its concern with the proposed new paragraph is that it might do a reconductor job and not replace an entire line, and it was not sure how to report that without duplicating the information. It was suggested that the rule could require feet of lines replaced and that might address MidAmerican's problem with reporting. MidAmerican suggested that the information reported would be clearer if it was separated by the type of work performed rather than by miles of line replaced.

MidAmerican then responded to questions about the line size categories for reporting under the new paragraph. In its initial comments, MidAmerican stated that it would report transmission lines at 34.5 kV and above, which is different than Board rule 20.1(3) that describes transmission lines as 69 kV and above. MidAmerican indicated that it could report transmission lines using the definition in subrule 20.1(3). MidAmerican also indicated that it could report 4 kV lines separate from other distribution lines.

In response to the Board's February 9, 2007, order, MidAmerican indicated that the proposed new paragraph would not create any additional cost.

Consumer Advocate

Consumer Advocate did not comment on the proposed new paragraph.

BOARD DISCUSSION

It appears from the comments that IPL has, and could readily provide, data on miles of lines replaced and poles inspected and replaced consistent with the

proposed requirement in 199 IAC 20.18(7)"i"(1). However, MidAmerican's maintenance practices and records include replacement of short, isolated sections of conductor, not necessarily associated with pole or complete line replacements. It appears the reporting alternative proposed by MidAmerican would not distinguish between total line replacements and localized maintenance or repairs (i.e. complete versus partial replacements). It also appears MidAmerican would provide the replacement data only by voltage classification, not actual voltage. Further, the locations of work done would be provided only in the most general terms.

The comments indicate that under its proposal, MidAmerican could not provide replacement data in the manner anticipated by the new requirement and it is unclear how useful the data from MidAmerican's alternate proposal would be. To adopt MidAmerican's suggested revisions would require a tailored approach to review MidAmerican's practices based on the idiosyncrasies of how MidAmerican maintains its data.

Rather than revise the reporting requirement in subparagraph 20.18(7)"i"(1) to accommodate MidAmerican's record keeping, or adopting the proposed rules and forcing changes in that recordkeeping, the Board has decided not to adopt the proposed reporting requirements in 199 IAC 20.18(7)"i"(1).

The second part of the proposed reporting requirements, 199 IAC 20.18(7)"i"(2), seeks data on pole inspections and replacements. This information would provide another indicator of maintenance activity to support system reliability, joining capital and maintenance expenditures and tree trimming as system upkeep

indicators in the Board's annual report requirements. It appears from the record that both companies could provide this information. The Board will adopt the reporting requirement in proposed subparagraph 20.18(7)"i"(2).

The Board excluded the smaller utilities from the proposed reporting requirements to make the provision consistent with the other provisions in subrule 20.18(7) and because it was not sure that the small numbers that would be reported by the smaller utilities would provide any meaningful data on the reliability of the small utility's system. The comments have not convinced the Board that requiring the reporting requirements for smaller utilities would provide any additional check on the reliability of the smaller utilities' electric systems and the Board will not expand the reporting requirement to be adopted to the smaller utilities.

The adopted rule as revised reads as follows:

i. The annual reliability report, starting with the reliability report for calendar year 2008, shall include the number of poles inspected, the number rejected, and the number replaced.

2. Proposed Amendments to 199 IAC 25.3(1), 25.3(3), and 25.3(4)

Under current rule 199 IAC 25.3, electric utilities are required to file an inspection plan with the Board. The Board proposed to amend subrule 25.3(3) to add a new paragraph 25.3(3)"d" to require all utilities to include in their inspection plans a schedule of periodic inspection of wooden poles that includes more than visual examination and to establish written procedures for pole treatment, repair, and replacement. Comments were filed regarding this proposed requirement. There

were no comments on the editorial changes the Board proposed to 199 IAC 25.3(1), 25.3(3)"b," or 25.3(4).

IAEC

IAEC stated that the practices and procedures currently followed by its members meet the new requirements, so IAEC does not object to proposed new paragraph "d." IAEC stated that it developed a Model Plan for its members and the member utilities under this Model Plan do more than visual inspections, so the new paragraph should not require any additional action. The Model Plan includes a requirement for a schedule of periodic inspections of wooden poles. The Model Plan follows the Rural Utilities Service (RUS) Bulletin 1730B-121 concerning pole inspection and maintenance. IAEC believes compliance with the RUS Bulletin will meet the requirements of 25.3(3)"d"(3). IAEC concluded that its members are in compliance with the proposed new requirements for pole inspections and should not be required to change current practice if the amendments are adopted.

IAEC indicated in response to the Board's February 9, 2007, order that member utilities were in compliance with the proposed inspection requirements and therefore the requirements would generate no additional cost.

IAMU

IAMU stated that municipal utilities file electric transmission and distribution inspection plans with the Board. The model inspection program followed by the municipal utilities was developed in close cooperation with Board staff and includes an inspection schedule for the visual inspection of utility poles. IAMU pointed out that

there are 21 separate items listed in the Model Plan that must be separately checked and those items include "hammer test pole" and "pole condition at and above ground." IAMU suggested that these two checks are adequate methods for classifying deficiencies and for determining the need for more detailed inspection, such as taking a boring from the below-ground portion of the pole. IAMU stated that these standards follow the National Electric Safety Code, Part 2, Section 21-214A and include provisions for recordkeeping and annual certification of compliance.

IAMU stated that municipal utility inspection plans are subject to Board staff review and where deficiencies are noted, timely correction is expected. Pole sounding and life-extending treatment techniques are regularly included in the line mechanic training programs. The issue of requiring more rigorous inspection of facilities is one that is of particular concern for rate-regulated utilities since they can cut costs to increase their returns. Municipal utilities operate on a not-for-profit basis and do not have to balance the interests of shareholders with those of customers.

IAMU suggested that the proposed rules imply that filed plans must include written procedures. Currently, utilities are required to maintain written procedures, but they are not filed with the plan. If the Board adopts additional requirements for inspection or defines more clearly the procedures such inspections must entail, it should do so without the requirement of filing plans. IAMU concluded that changes in the inspection rules as they apply to municipal utilities are unnecessary. An additional filing requirement would not trigger the need for additional testing. However, it would impose an additional administrative burden on these utilities.

IAMU contended that the additional filing requirements would not increase the safety of municipal operations and a plan detailing pole testing procedures is already available to the Board and the public for inspection. The costs of filing these procedures would include copying, filing, and administrative staff time for each utility. IAMU indicates that it surveyed a sample of different-sized utilities and learned that many of these utilities had placed their lines underground. In addition, the procedures do not require approval of the utility's governing body, so the cost of implementing the proposed amendments would not appear to be significant.

IPL

IPL believes that its current Delivery System Replacement Program (DRP) meets the requirements of new paragraph "d." The DRP program includes a visual and sound inspection of all distribution poles every ten years and of all transmission poles every five years. The transmission system is also visually inspected annually. IPL states that this process identifies critical items in need of repair and also identifies poles in need of replacement. The items are either fixed within 180 days or a scope for rebuild is created. Poles identified as rejects are either replaced or reinforced. If a scope is created, it is placed in the five-year work plan.

Projects are completed within five years and 180 days of the date the inspection was completed. IPL stated that it is planning to enhance the DRP inspection process to include both visual and sound inspection of both distribution and transmission poles that are 25 years of age or older on the scheduled circuits. Studies have indicated that this type of inspection can detect up to 73 percent of

reject poles. This process will increase the cost of inspections, but it will provide additional data.

IPL estimated it has approximately 300,000 distribution poles and 60,000 transmission poles over 25 years of age. IPL estimated it will excavate and bore approximately 30,000 distribution poles and 12,000 transmission poles annually on the ten-year and five-year inspection programs. The revision to the inspection process is estimated to add approximately 20 percent to IPL's inspection costs.

Consumer Advocate

Consumer Advocate stated that the new proposed paragraph 25.3(3)"d" enhances the documentation and reporting requirements with respect to inspection and maintenance of poles. Consumer Advocate suggests that the degree of improvement, if any, of the reliability of the electric system that will be produced by testing in addition to visual inspection, and the costs of such testing, are unknown. Consumer Advocate urges the Board to direct the electric utilities subject to the proposed amendments to prepare and file with the Board, and serve on Consumer Advocate, estimates of the annual impact of the proposed testing requirement on the costs incurred to inspect and maintain poles.

MidAmerican

MidAmerican did not comment on the proposed amendments to rule 25.3.

BOARD DISCUSSION

The main purpose of proposed new paragraph 199 IAC 25.3(3)"d" is to ensure that all utilities have adequate testing procedures in place to detect pole deterioration and repair or replace poles where needed. These procedures help ensure that the reliability of a utility's electrical system is maintained and should reduce the number of outages due to defective poles. The Board is less concerned that a utility file the written procedures with the Board than with the utility having procedures in place that require more than visual inspection of poles to ensure detection of defective poles.

IPL, IAEC, and IAMU contend that they have existing procedures that are adequate to meet the intent of proposed rule 25.3(3)"d." Upon review, it appears that the IAEC Model Plan is based upon RUS Bulletin 1730-121 and has the required inspection techniques in addition to visual inspections that are contemplated to comply with proposed new paragraph 25.3(3)"d." IAEC should ensure its members have written inspection procedures that include the additional inspection techniques. If the written procedures maintained by the IAEC members provide for these additional inspections, then Board staff will be able to determine whether the additional inspections are being conducted during compliance inspections of the utilities.

IAMU suggested that compliance by its members with the IAMU Model Plan would meet the requirements of proposed new paragraph 25.3(3)"d." The IAMU Model Plan includes an inspection check list on page 38 that includes certain categories of inspection, including "hammer test pole" and "pole condition at and

above ground line" as well as visual inspection. The list does not include boring or other non-visual testing techniques.

IAMU has expressed some resistance to its members making an additional filing of written procedures and being required to modify its Model Plan. If the Board adopted the new requirements, all of the municipal electric utilities would be required to file an updated plan. After consideration of IAMU's comments, the Board has determined that the additional filing requirement is not necessary. The IAMU Model Plan lists items that are required to be inspected and these include a requirement for boring or other techniques beyond visual inspection. The intent of proposed paragraph 25.3(3)"d" is to ensure poles are inspected by methods in addition to visual inspections. IAMU maintains that the existing plans meet this requirement. The Board will accept this assurance and Board staff inspections will ensure that the additional inspections are being conducted.

Since the Board is revising the proposed amendments to remove the requirement that modifications to maintenance plans be filed with the Board, the Board expects that electric cooperatives and municipal electric utilities will conduct pole inspections that are more than visual inspections. Board staff inspects the electric cooperative and municipal systems periodically and will be able to determine whether these utilities are performing the additional inspections. If Board staff finds that municipal or electric cooperative utilities are not conducting adequate pole inspections, the Board will consider opening dockets to determine whether civil penalties should be assessed for failure to follow maintenance plans. The Board's

main concern is the reliability of the electric delivery system and the utilities should understand that it is their responsibility to do the inspections that will ensure that reliability.

Because some of the other proposed rule amendments in subrules 25.3(1), 25.3(3), and 25.3(4) were predicated upon the adoption of new paragraph 25.3(3)"d", the revision to proposed paragraph "d" will require some additional revisions to the proposed amendments. The revisions adopted to the proposed amendments are set out below. The "Adopted and Filed" notice attached to this order contains the specific language, as revised, that will be adopted by the Board.

25.3(1) *Filing of plan.* Each electric utility shall adopt and file with the board a written ~~program~~ plan for inspecting and maintaining its electric supply lines and substations (excluding generating stations) in order to determine the necessity for replacement, maintenance, and repair, and for tree trimming or other vegetation management. If the plan is amended or altered, revised copies of the appropriate plan pages shall be filed.

25.3(3)

b. Inspection of lines, poles, and substations. (No changes will be adopted to the title in the current subrule.)

d. Pole inspections. Pole inspections shall periodically include an examination of the poles that includes tests in addition to visual inspection in appropriate circumstances. These additional tests may include sounding, boring, groundline exposure, and, if applicable, pole treatment.

~~(1) *Scope of inspection.* Pole inspections shall include an examination of the poles that includes tests in addition to visual inspection in appropriate circumstances. These additional tests may include sounding, boring, groundline exposure, and, if applicable, pole treatment.~~

~~(2) *Pole inspection schedule.* As part of the inspection plan required by this subrule, the utility shall include a~~

~~schedule for periodic inspection of wooden poles. The period between inspections shall be based upon established good practice in the industry and may vary with soil conditions and type of wood, among other factors.~~

~~(3) *Procedures.* The inspection plans required by this subrule shall include written procedures for the inspection of poles and for determining the need for pole treatment, repair, or replacement.~~

25.3(4) *Records.* Each utility shall keep sufficient records to demonstrate compliance with its inspection and vegetation management ~~programs plans~~. For each inspection unit, the records of line, pole and substation inspections shall include the inspection date(s), the findings of the inspection, and the disposition or scheduling of repairs or maintenance found necessary during the inspection. For each inspection unit, the records of vegetation management shall include the date(s) during which the work was conducted. The records shall be kept until two years after the next periodic inspection or vegetation management action is completed or until all necessary repairs or maintenance are completed, whichever is longer.

COST OF AMENDMENTS

When the amendments were proposed, it was unclear whether compliance with the proposed amendments would add any additional cost to the operation of the utilities. The Board has revised the proposed amendments to eliminate most of the additional requirements that could have required additional cost as described in the comments. Based upon the revisions to the proposed amendments and the written and oral comments, the Board finds that the adopted amendments will have little effect on the cost of utility operations.

ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. A rule making identified as Docket No. RMU-06-10 is adopted.
2. The Executive Secretary is directed to submit for publication in the Iowa Administrative Bulletin an "Adopted and Filed" notice in the form attached to and incorporated by reference in this order.

UTILITIES BOARD

/s/ John R. Norris

/s/ Curtis W. Stamp

ATTEST:

/s/ Judi K. Cooper
Executive Secretary

/s/ Krista K. Tanner

Dated at Des Moines, Iowa, this 14th day of June, 2007.

UTILITIES DIVISION [199]

Adopted and Filed

Pursuant to the authority of Iowa Code sections 17A.4, 476.2, 476.32, and 478.13, the Utilities Board (Board) gives notice that on June 14, 2007, the Board issued an order in Docket No. RMU-06-10, In re: Filing of Line and Pole Replacement Data [199 IAC 20.18(7) and 25.3(3)], "Order Adopting Amendments," that adopted amendments to 199 IAC 20.18(7) and 25.3(1), 25.3(3), and 25.3(4). Notice of Intended Action with the proposed amendments was published in IAB Vol. XXIX, No. 13 (12/20/06) p. 857, as ARC 5612B.

The Board proposed amendments to subrule 20.18(7) to require rate-regulated electric utilities with more than 50,000 Iowa retail customers to include information about the replacement of lines and poles in their annual reliability reports and to subrules 25.3(3) to require all electric utilities to include a schedule for pole inspections beyond visual inspections in their inspection plans required in 199 IAC 25.3(476, 478). Editorial changes were also proposed in rule 25.3.

MidAmerican Energy Company (MidAmerican), Interstate Power and Light Company (IPL), the Consumer Advocate Division of the Department of Justice (Consumer Advocate), the Iowa Association of Electric Cooperatives (IAEC), and the Iowa Association of Municipal Utilities (IAMU) filed initial comments. On February 7, 2007, an oral presentation was held to receive oral comments and allow the Board to ask questions about the comments. On February 9, 2007, the Board

issued an order requesting that MidAmerican, IPL, IAEC, and IAMU file estimates of any additional costs associated with the proposed amendments. MidAmerican, IAEC, and IAMU filed responses to the Board's order.

The Board is adopting amendments to subrules 20.18(7), 25.3(1), 25.3(3), and 25.3(4) with revisions based upon the comments. The order containing a summary of the comments and a discussion of the revisions can be found on the Board's Web site, www.state.ia.us/iub.

These amendments are intended to implement Iowa Code sections 17A.4, 476.2, 476.32, and 478.13.

The amendments become effective August 8, 2007.

The following amendments are adopted.

Item 1. Adopt new paragraph 20.18(7)"i" as follows:

i. The annual reliability report, starting with the reliability report for calendar year 2008, shall include the number of poles inspected, the number rejected, and the number replaced.

Item 2. Amend subrule 199—25.3(1) as follows:

25.3(1) *Filing of plan*. Each electric utility shall adopt and file with the board a written ~~program~~ plan for inspecting and maintaining its electric supply lines and substations (excluding generating stations) in order to determine the necessity for replacement, maintenance, and repair, and for tree trimming or other vegetation management. If the plan is amended or altered, revised copies of the appropriate plan pages shall be filed.

Item 3. Adopt new paragraph 199—25.3(3)"d" as follows:

d. Pole inspections. Pole inspections shall periodically include an examination of the poles that includes tests in addition to visual inspection in appropriate circumstances. These additional tests may include sounding, boring, groundline exposure, and, if applicable, pole treatment.

Item 4. Amend subrule **199—25.3(4)** as follows:

25.3(4) Records. Each utility shall keep sufficient records to demonstrate compliance with its inspection and vegetation management ~~programs~~ plans. For each inspection unit, the records of line, ~~pole,~~ and substation inspections and pole inspections shall include the inspection date(s), the findings of the inspection, and the disposition or scheduling of repairs or maintenance found necessary during the inspection. For each inspection unit, the records of vegetation management shall include the date(s) during which the work was conducted. The records shall be kept until two years after the next periodic inspection or vegetation management action is completed or until all necessary repairs or maintenance are completed, whichever is longer.

June 14, 2007

/s/ John R. Norris
John R. Norris
Chairman