BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of an Investigation into City Utilities of Springfield Plastic Pipe Failures and the Adequacy of its Leak Survey Procedures, Installation Procedures and Replacement Criteria

Case No. GS-2004-0257

MOTION TO FILE JOINT RECOMMENDATION CONCERNING <u>PIPELINE REPLACEMENT SCHEDULE</u>

COMES NOW the Staff of the Missouri Public Service Commission (Staff) by and through counsel, and for its Motion to File the Joint Recommendation Concerning Pipeline Replacement Schedule states:

Attached is the Joint Recommendation agreed to by the Staff of the Commission and City Utilities of Springfield. The Recommendation contains the agreement concerning the amount of Aldyl "A" polyethylene (PE) piping City Utilities will replace on an annual basis. These replacements will be the segments listed on the Plastic Pipe Failure Master List and segments that have been identified as being in a rock-dirt backfill from the exposed pipe reports and spot checks.

The replacements will be prioritized based on risk factors, such as, MAOP, date of installation, installation in rock-dirt backfill, continuous pavement areas, areas of high population density, areas of previous leakage, and other appropriate criteria.

The Staff and City Utilities will evaluate the effectiveness of this 2-year replacement program and determine the recommendations for a program that will begin in calendar year 2010.

Additionally, City Utilities will continue to conduct an annual leakage survey over pre-1983, 60 psig plastic piping, City Utilities will continue to conduct quarterly leak surveys of the downtown business district. City Utilities will also continue to inspect any exposed plastic piping for the proper backfill, and if rock-dirt mix is found, the main segments or larger diameter service line shall be added to the Plastic Pipe Failure Master List for replacement. Finally, City Utilities will begin conducting annual leakage surveys over 1983 and 1984, 60 psig plastic piping.

WHEREFORE, the Staff and CU request the Commission accept and order compliance with the above agreed upon program.

Respectfully submitted,

/s/ Lera L. Shemwell

Lera L. Shemwell Deputy General Counsel Missouri Bar No. 43792

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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 23rd day of October 2007.

/s/ Lera L. Shemwell

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of an Investigation into City Utilities of Springfield Plastic Pipe Failures and the Adequacy of its Leak Survey Procedures, Installation Procedures and Replacement Criteria

Case No. GS-2004-0257

JOINT RECOMMENDATION CONCERNING PIPELINE REPLACEMENT SCHEDULE

COME NOW City Utilities of Springfield (City Utilities) and the Staff of the Missouri Public Service Commission by and through counsel, and for the Joint Recommendation Concerning Pipeline Replacement Schedule state:

BACKGROUND

On March 30, 2007, the Energy Department – Safety/Engineering Staff of the Missouri Public Service Commission (Staff) filed a *Staff Status Report* (Report) in Case No. GS-2004-0257. The Report detailed the current status of Staff's evaluation of City Utilities plastic pipe monitoring, evaluation, and replacement program. The Report listed several recommendations to the current replacement program for plastic piping.

On April 16, 2007, City Utilities voluntarily filed *City Utilities of Springfield's Response to PSC Staff Recommendation Filed March* 30, 2007 (Response). City Utilities' Response listed several objections to Staff's recommendations.

On April 18, 2007, the Commission issued an Order Directing Filing for Staff to file a reply to City Utilities' Response no later than April 26, 2007.

On April 26, 2007, Staff filed *Staff's Reply to the Commission's Order to Respond to City Utilities of Springfield Response to PSC Staff Recommendations* (Reply). Staff's Reply in Case No. GS-2004-0257 requested additional time to address concerns with the program and formulate a reply to City Utilities' April 16, 2007 Response.

On April 30, 2007, the Commission issued its Order *Granting Extension of Time for Staff to file its reply to City Utilities' April 16, 2007 Response* no later than May 10, 2007.

On May 10, 2007, Staff filed *Staff's Reply to Response of City Utilities of Springfield*. Staff's Reply listed several modifications to Staff's March 30, 2007 recommendations.

On May 17, 2007, City Utilities voluntarily filed *City Utilities of Springfield's Response to PSC Staff Reply Filed May 10, 2007*. In this response, City Utilities indicated that it does not object to Staff's modified recommendations, with two exceptions. The Commission issued an *Order Directing Staff Response to file a Reply to City Utilities' May 17, 2007 Response* no later than June 18, 2007.

On June 18, 2007, Staff filed *Staff Reply to City Utilities of Springfield Response to Staff's Reply Filed May 10, 2007*. Staff reiterated their belief that City Utilities should follow recommendations contained in Staff's May 10, 2007 Reply with some modification to the percentage amount of additional, adjacent sections that should be replaced.

On September 25, 2007, GS-2004-0257 was on the Commission Agenda for Case Discussion. As a result of the discussion, Chairman Davis indicated that he would meet with Staff and City Utilities to further discuss the matter.

After discussions between the parties, Staff and City Utilities have reached an agreement on a course of action for the replacement program for calendar years 2008 and 2009. Staff and City Utilities will review the program to determine the actions that will be pursued in calendar years 2010 and beyond.

The following are the program parameters that Staff and City Utilities have agreed to follow for calendar years 2008 and 2009.

REPLACEMENT PROGRAM CRITERIA FOR 2008 AND 2009

1. City Utilities shall replace a minimum of 6 miles of DuPont Aldyl "A" polyethylene (PE) piping annually (service lines 1 ¼ inches and larger and mains) during calendar years 2008 and 2009. These replacements will be segments listed on the Plastic Pipe Failure Master List and segments that have been identified from the exposed pipe reports and spot checks as being in a rock-dirt backfill.

2. The replacements will be prioritized based on risk factors, such as, Maximum Allowable Operating Pressure (MAOP), date of installation, installation in rockdirt backfill, continuous pavement areas, areas of high population density, areas of previous leakage, and other appropriate criteria.

3. To this point the primary focus of the replacement program has been on Aldyl "A" piping that was manufactured before 1983 that was is installed in a dirt-rock mix. However, a technical report that Staff has reviewed from Jana Laboratories¹ concerning Aldyl "A" pipe indicates there are problems with piping that was manufactured before 1985. Therefore, Staff believes the focus of the replacement program of Aldyl "A" piping

¹ Dr. Gene Palermo, Correlating Aldyl "A" and Century PE Pipe Rate Process Method Projections With Actual Field Performance.

should be extended to include 1983 and 1984 pipe. Therefore, the primary focus of the replacement program should be on Aldyl "A" piping that was manufactured before 1985 (pre-1985) that is installed in a rock-dirt mix. Replacements of Aldyl "A" piping installed in 1985 and later would normally be a lower priority, but can be included in the total annual mileage if the segments have experienced leaks, are in a rock-dirt backfill, or if the piping is connected to a higher priority segment that is being replaced.

4. In early 2009, City Utilities will identify Aldyl "A" service lines installed prior to 1990 that are 1 ¼ inches and larger as part of a new geographic information system that is being developed. The replacement footages of 1 ¼ inch and larger service lines, based on risk factors noted above, that were installed prior to 1990 can be counted toward the required total annual mileage of replacements.

5. The Staff and City Utilities will evaluate the effectiveness of this 2-year replacement program and determine the recommendations for a program that will begin in calendar year 2010.

Non-Replacement Criteria

In addition to the above replacement program, City Utilities will continue to meet the following requirements of the original agreement.

6. An annual leakage survey will be conducted over pre-1983, 60 psig plastic piping. In addition, City Utilities will begin conducting annual leakage surveys over 1983 and 1984, 60 psig plastic piping.

7. Quarterly leak surveys of the downtown business district.

8. Any exposed plastic piping will be inspected for proper backfill, and if rockdirt mix is found, the main segments or larger diameter service line (1 ¼ inch and larger) shall be added to the Plastic Pipe Failure Master List for replacement.

9. Semi-annual reports and monthly updates will be submitted to the Staff.

10. The mileage of pre-1985, 60 psig mains that remain in the distribution system will be provided to Staff.

11. Staff and City Utilities will continue to monitor the effectiveness of the Replacement Program. If at any time, Staff determines that the program requirements should be enhanced, it will immediately bring its concerns and recommendations to the Commission.

REPLACEMENT PROGRAM ACCOMPLISHMENTS

Staff and City Utilities acknowledge that City Utilities has successfully completed the following recommendations that have been outlined in GS-2004-0257.

1. Replaced 7.1 miles from the Plastic Pipe Failure Master list, from the inception of the program. Included in the total mileage, 4.21 miles were replaced by the due date of August 16, 2007 as specified in the Staff's March 30, 2007 Status Report.

2. Replaced 104 plastic service lines (main-to-meter) between January 2005 and July 22, 2005. City Utilities continues to make main-to-meter replacements of any newly discovered leaking service lines, which have been damaged by rock impingement.

3. Effective January 1, 2005, City Utilities modified its "Plastic Pipe Failure Report" form, "Gas Leak" form and "Gas Leak Repair" form to include a specific category for "Rock Impingement". Its computer "Integrated Gas" database was also modified to

track the new rock impingement category from the leak forms beginning with the 2005 leak data.

4. During September and December 2004, City Utilities' employees involved in replacing plastic piping received adequate training on the proper identification of leaks resulting from rock impingement and how to report the leaks.

5. City Utilities revised its Gas Construction Standards following Staff's June 16, 2004 recommendations to specifically require a minimum of four to six inches of bedding material around all newly installed plastic piping (both mains and services) in an open trench.

6. Reviewed the individual leak reports for prior main-leak locations (1983-2004), as recommended by Staff, to spot-check and determine the pipe bedding condition near the pipe wall. With the 118 locations that were already removed from the list, City Utilities agreed to spot-check the remaining locations (approximately 33) during 2005. City Utilities completed these spot-checks during July and August 2005.

Other Provisions

1. This Joint Recommendation has resulted from extensive discussions between City Utilities personnel and Commission Staff. In the event the Commission does not approve this Joint Recommendation without modification, the Joint Recommendation shall be void and no signatory shall be bound by any of the agreements or provisions hereof.

2. The Staff shall also have the right to provide, at any agenda meeting at which this Joint Recommendation is noticed to be considered by the Commission,

whatever oral explanation the Commission requests, provided that Staff shall, to the extent reasonably practicable, provide the other Parties with advance notice of when the Staff shall respond to the Commission's request for such explanation once such explanation is requested from Staff. Staff's oral explanation shall be subject to public disclosure, except to the extent it refers to matters that are privileged or protected from disclosure pursuant to any protective order issued in this case.

3. If the Commission requests, the Staff shall file suggestions or a memorandum in support of this Joint Recommendation. Each of the other Parties shall be served with a copy of any such suggestions or memorandum and shall be entitled to submit to the Commission, within five (5) days of receipt of Staff's suggestions or memorandum, responsive suggestions or a responsive memorandum which shall also be served on all Signatories. The contents of any memorandum provided by any Party are its own and are not acquiesced in or otherwise adopted by the other Parties to this Stipulation, whether or not the Commission approves and adopts this Stipulation.

WHEREFORE, the Staff and City Utilities request the Commission accept and order compliance with the above agreed upon Replacement Program for calendar years 2008 and 2009, as well as having a program developed by Staff and City Utilities that begins in calendar year 2010 and beyond. Finally, the Staff and City Utilities requests that the Commission acknowledge the recommended items that have been completed by City Utilities that are contained in the preceding **ACOMPLISHMENTS** section. The parties request the Commission accept this Joint Recommendation.

Respectfully submitted,

/s/ Lera L. Shemwell

Lera L. Shemwell Deputy General Counsel Missouri Bar No. 43792

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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 23rd day of October 2007.

/s/ Lera L. Shemwell