BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

USW Local 11-6	)	
	)	
Complainant,	)	
v.	)	Case No. GC-2006-0060
	)	
Laclede Gas Company,	)	
Respondent.	)	

TESTIMONY OF STEPHEN HENDRICKS

I, Stephen Hendricks, declare and state:

Q. By whom are you currently employed?

A. Laclede Gas Company.

Q. For how long?

A. Twenty-two years.

Q. In what capacity?

A. I worked in Construction & Maintenance for the first two years. I have worked in the Service department ever since. I am a general fitter, which means that I work on residential, commercial, industrial and institutional piping. I am normally assigned to emergency work, although I sometimes work a pre-assigned route.

Q. Do you have any position with USW 11-6?

A. Yes, I have been a union steward for USW 11-6 and its predecessors for 16 years.

Q. Are you familiar with a procedure known as turn off/turn on inspections or TFTO?

A. Yes, I have performed TFTOs for years and years. When I performed route work, approximately 60-80% of a route was usually TFTO inspections.

Q. What is a TFTO?

A. It is an inspection conducted immediately following the transfer of gas service at a residence to ensure the meter and every gas appliance in the residence are properly connected and not leaking, valves are turned properly, flues are in proper working order and there is no blockage, carbon build-up or odor of gas that could foreshadow carbon monoxide poisoning or danger of fire or explosion.

Q. Are TFTOs only performed when a residence changes ownership?

A. No, TFTOs are also, and frequently, performed when a rental property changes tenants. These are called landlord accounts. Until approximately the first quarter of 2005, we performed TFTOs on landlord accounts whenever the service account changed name, even though we did not actually turn the gas off and then back on.

Q. Have you ceased performing them altogether since first quarter 2005?

A. No, Laclede has substantially limited them since that time and I am not aware of the criteria being used to determine when we conduct them.

Q. You said that landlord accounts are frequent. Approximately what percentage of the TFTOs you have performed have been for landlord accounts?

A. I work primarily in the City and County of St. Louis, where both Washington University and St. Louis University are located. There is a lot of student and faculty turnover of rental property in the spring and fall. On average, probably 40-45% of the TFTOs I have performed have been on landlord accounts.

Q. How long does a TFTO generally take to conduct?

A. They vary, but generally about 25-30 minutes.

Q. Why did you conduct TFTOs?

A. Until about one year ago, Laclede mandated them for safety purposes.

Q. How did Laclede convey to its employees that TFTOs were required for safety purposes?

A. We were told that in training. We are also told that through discipline; specifically, Laclede has informed us that it will issue discipline to any employee who fails to follow a safety protocol, including the performance of a TFTO.

Q. **In your experience, are they in fact an important safety measure? Why or why not?**

A. Yes. There are many gas hazards and potential hazards that are detected during TFTOs, both on the customer side of the meter and on Laclede's side of the system.

Q. Please provide some examples.

A. 1. *Flex Connectors.* I have frequently discovered uncapped fuel runs going to the stove. Flex connectors are the corrugated pipe that is generally attached to the back of a stove unit to permit a resident to pull the stove forward to clean behind it. The flex connector is supposed to have a shut-off valve on the opposite end from the stove unit. When someone leaving a residence decides to take the stove unit, it is not uncommon for them to unhook the flex connector from the stove, rather than from the shut off valve. The person then may stuff an object into the opening and/or cover the opening with tape, rather than locate and turn off the shut-off valve. When this occurs, gas leaks around the object or out from under the tape and into the kitchen, creating an uncapped fuel run. Flipping a light switch in that circumstance could cause the room to spontaneously ignite.

2. *Vent Piping.* Furnaces each have a vent pipe, which is necessary to expel carbon monoxide from the house. Many things can happen to make a vent pipe ineffective, causing carbon monoxide poisoning, such as erosion creating a hole in the pipe, a seam in the pipe opening up due to age or moisture, or a pipe that was not screwed in falling off.

3. *Delayed Ignition.* Furnaces sometimes develop delayed ignition because of dirt that causes blockage of a cross-over track. When this occurs, gas builds up and an explosion is likely once the gas finally ignites.

4. *Cobweb Build-up.* Cobwebs build up in the chamber of the furnace's burner orifice, and gas cannot penetrate the web membrane. This causes the flame to back up and go out the front of the furnace. Cobweb build-ups can cause an explosion because of delayed ignition. Alternatively, it can cause a boom, followed by flames that roll up to six feet. If a customer investigates the boom by kneeling in front of the furnace, s/he could get burned by the flash of flames out the front.

5. *Stacked Books.* Furnaces in apartments are often stored behind a closed door that looks like a closet. Students sometimes use the furnace cupboard as a closet, stacking books in the front. This causes the furnace to carbonize, which in turn leads to carbon monoxide poisoning. The student resident may not realize that s/he is feeling ill due to poisoning, so the carbonized furnace is not discovered until a Laclede service employee performs a TFTO. If no TFTO was performed, the situation would continue to get worse; in a tight house, the carbon monoxide would eventually kill the resident.

6. *Rusty Pipe.* There are also problems on the Laclede side of the system that are detectable by a TFTO and really will not be detected *except* by a TFTO, a turn on inspection, or a meter reconnect inspection. Laclede is responsible for all piping before the point of entry into the residence. It is not uncommon for that piping to rust out, especially if the pipe lays against a concrete wall, because the acid in the wall eventually erodes the outside layer of metal pipe. This creates a #1 leak, the worst type, because it causes uncontrolled gas to migrate into the

home. The negative pressure furnace will suck that gas into the house causing a fire or explosion.

Q. In performing TFTOs, how often have you found a hazard similar to those described above?

A. In approximately one of every four.

Q. Why would these hazards not be detected through a house sale inspection?

A. Three primary reasons. First, there is no house sale inspection when a rental house or apartment changes tenants. Even in the event of a property sale, however, the inspection is generally performed before the seller has moved out. Between the time of that inspection and closing, the seller moves out, sometimes disconnecting and removing a washer and dryer, a stove or some other gas appliance. That creates situations in which we might see uncapped fuel running without a shut off. Third, if there is an increase in temperature between the time of the inspection and the time of closing, the new resident may be likely to turn on the attic fan, so the service department employee checks the house with that in mind. The negative pressure created by the attic fan may cause the water heater to spill carbon monoxide back into the house, which is only discovered by the TFTO.

Q. Are you familiar with Laclede's current automatic meter reading program?

A. Yes.

Q. **Laclede is taking the position that TFTOs and annual meter reads are not necessary anymore, presumably due to the institution of automatic meter reading. Have you seen any evidence that AMR will make TFTOs and annual meter reads unnecessary?**

A. No, quite to the contrary. I have been dispatched to a number of residences to fix a meter that is leaking because of the improper installation of AMR. In one such case, the customer

called Laclede within one hour of installation complaining of a gas smell. I also have a list of meters in the shop that were replaced due to AMR installation. Some problems with AMR are not going to be detected by the customer, but would likely be detected by an annual meter read and certainly by a TFTO inspection. Such problems would also be detected at the time of installation if the AMR device were being installed by a trained gas professional.

Q. **What kind of problems with AMR may not being detected by customers but would be by a TFTO or annual read?**

A. Some of the AMR devices are causing meters not to register, in other words, the amount of gas usage is not being recorded at all, because the hands of the meter are not moving. Sometimes when AMR is installed on-site the rubber gasket does not seat on the face plate of the meter, therefore causing the meter to leak. Customers will not always smell the leak, depending on the location of the meter, the scope of the leak and the sensitivity of the customer's nose. Also, based on my experience with the impact of weather changes on metal and plastic piping, I anticipate that the plastic gears in the AMR device will not be able to withstand severe temperature changes, with the result that they will get brittle and break, causing the meter either not to register or to spin too fast. I have already been advised that some of the meters with AMR may be spinning too fast, with the result that the customer's bill will be too high.

Q. **You testified earlier that Laclede has enforced the safety aspect of TFTOs by disciplining employees who fail to follow the protocol. Have you ever been disciplined due to a failure to comply with a safety protocol?**

A. Yes, I was suspended for two days about two years ago for my failure to locate a leak during a turn on, not during a TFTO.

Q. **What happened?**

A. I committed human error. I went to turn the gas on at a residence that had a basement and a fruit cellar. The meter was in the basement, which had no light. The basement was filled with debris from flooding and it was thick with spider webs that further blocked visibility. My flashlight was the only source of light in the basement. As a result, I failed to realize that there was a cellar door behind some belongings the resident had stored in the basement. Also, for some reason that I cannot explain, my combustive gas indicator did not go off when I turned on the gas, which should have occurred since there was a leak.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct and that I have personal knowledge of the facts contained herein and, if called upon to testify, I could and would competently testify thereto.

Executed on the 4th day of May, 2006

Stephen Hendricks