Decision No. R12-0674

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 12F-113E

SUSAN GOLD,

COMPLAINANT,

V.

PUBLIC SERVICE COMPANY OF COLORADO,

RESPONDENT.

RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
KEITH J. KIRCHUBEL
DENYING MOTION; DISMISSING COMPLAINT; AND
CLOSING DOCKET

Mailed Date: June 21, 2012

I. <u>STATEMENT</u>

1. Complainant Susan Gold (Ms. Gold) initiated this proceeding with the filing of a Complaint on February 6, 2012.¹ The Complaint alleges that the method by which Respondent Public Service Company of Colorado (Public Service) measures electric service at Ms. Gold's two properties is causing severe health effects for Ms. Gold. She seeks to have the existing meters replaced with older electro-mechanical meters that do not feature any type of radio frequency transmitter.

¹ Subsequently, at Ms. Gold's request and without objection from Public Service, the Complaint was designated "confidential" by order of the ALJ.

2. On February 8, 2012, the Commission issued an Order to Satisfy or Answer to Public Service. That Order also included a notice of hearing in this matter for March 23, 2012.

- 3. On February 9, 2012, this Docket was assigned to the undersigned Administrative law judge (ALJ) for disposition.
- 4. Also on February 9, 2012, Complainant Ms. Gold informed the Commission via email correspondence that she was not available for hearing on March 23, 2012.
- Respondent Public Service filed its Answer to the Complaint on February 17,
 Public service maintains that its metering hardware is reasonably safe and is not the cause of Ms. Gold's health effects.
- 6. In response to Ms. Gold's request, the hearing was rescheduled to April 10, 2012. Later, Ms. Gold stated that she was unavailable on that date. The ALJ directed the parties to confer and agree upon an alternative hearing date. Ultimately, the evidentiary hearing in this matter was set to convene on May 3, 2012, pursuant to Decision No. R12-0432-I.
- 7. On May 3, 2012, a hearing was convened in the Commission offices. Ms. Gold appeared on her own behalf. Public Service appeared through its counsel, Ms. Geraldine Kim. The ALJ received the testimony of Ms. Gold, Mr. Jeff Eden,² and Mr. Daniel Nordell.³ Hearing Exhibits No. 1, No. 2, No. 3, No. 4, No. 5, No. 51, No. 52, No. 53, and No. 54 were offered and admitted.

² Mr. Eden is a Customer Advocate/Analyst employed by Public Service.

³ Mr. Nordell is a registered professional engineer employed as a Senior Engineer by Excel Energy, the parent company of Public Service.

8. Without objection, Hearing Exhibits No. 1, No. 2, and No. 53 were designated as "confidential" consistent with the Commission's Rules of Practice and Procedure, 4 *Code of Colorado Regulations* (CCR) 723-1. Confidential Hearing Exhibit No. 1 and Hearing Exhibit No. 5 were admitted as administrative hearsay. Exhibits No. 6 for identification (Complaint dated July 29, 2011, before the Maine Public Utilities Commission) and No. 7 for identification (Letter dated January 31, 2011, with attachment) were offered and rejected.

- 9. At the conclusion of the evidence, both parties made an oral closing statement. The ALJ took the matter under submission.
- 10. On May 8, 2012, Ms. Gold filed a Motion to Supplement the Record and Proffer of Tendered Evidence (Motion to Supplement). The Motion to Supplement seeks to include a transcription⁴ of a telephone conversation that purportedly occurred between Ms. Gold and a representative of Public Service on or about April 9, 2012. Ms. Gold later filed an amended version of the Motion to Supplement on May 14, 2012.
- 11. On May 16, 2012, Public Service filed a Response in opposition to the Motion to Supplement (Response).
- 12. On May 21, 2012, Ms. Gold filed a request to permit her to reply to the Public Service Response.
- 13. In accordance with § 40-6-109, C.R.S., the ALJ now transmits to the Commission, the record in this proceeding along with a written Recommended Decision.

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⁴ Prepared by Ms. Gold.

II. FINDINGS OF FACT

- 14. Ms. Gold occupies two separate properties. Her primary residence is within the City of Boulder, Colorado. She also has a vacation property in Riverside, Colorado. Public Service provides electric utility service to both properties.⁵
- 15. Both properties are relatively small. Ms. Gold testified that the Residence comprises approximately 740 square feet while the Cabin is only 600 square feet.
- 16. Ms. Gold experiences serious and debilitating health effects which she attributes electromagnetic hypersensitivity.⁶ Ms. Gold stated that her symptoms are caused by devices that emit electromagnetic fields (EMFs), including radio frequency transmitters. Ms. Gold's health effects are non-thermal, meaning that they are not related to the heating properties of such radiation.
- 17. In late 2011, Ms. Gold began to suffer from health effects consistent with electromagnetic sensitivity at her Residence. Beginning in February 2012, Ms. Gold experienced similar but more intense symptoms at her Cabin such that she no longer visits that property. Her health effects are less severe at the Residence.

⁵ At Ms. Gold's request and without objection from Public Service, the addresses of these two properties were identified confidentially. There is no dispute as to the location of the properties or that Public Service provides electric service to both. For clarity, the Boulder property will be referenced herein as "the Residence" and the Riverside property as "the Cabin."

⁶ In confidential testimony subject to cross-examination, Ms. Gold described the symptoms she experiences at her two properties. These symptoms will be referenced here generally as Ms. Gold's "health effects" in order to avoid publishing medically sensitive information.

18. EMFs result from the flow of electric current through a circuit. Depending on the source, EMF can be characterized by relatively higher or lower frequencies. Microwave ovens use higher frequency radiation to heat food. Radio transmission, such as from mobile phones, wireless networking routers and certain remote-control devices, results in EMF at frequencies below that of microwaves. Standard household appliances and energized wiring in a building will also emit EMFs albeit at significantly lower levels. Thus, most houses have a certain amount of background EMF at all times.

- 19. EMFs decrease in strength as one's distance from the source increases. Ms. Gold cites this proximity factor as critical given that the Residence and the Cabin are small spaces.
- 20. Ms. Gold has taken steps to eliminate as many sources of EMF from her properties as possible. She unplugs many electric appliances when they are not in use and she makes every effort not to use devices that transmit radio frequencies.
- 21. The Federal Communications Commission (FCC), which regulates devices emitting radio frequencies, has established safety guidelines pertaining to exposure to radio frequency radiation. These guidelines were developed in 1996 and focus on the thermal effects of radio frequency exposure. As documented in Hearing Exhibit No. 5, Federal health and safety agencies have not promulgated guidelines related to non-thermal effects of radio frequencies. Since October, 2008, electric utility service at the Residence has been measured using an Advanced Meter Infrastructure (AMI) system also known in industry parlance as a "smart meter." AMI meters transmit information related to electric usage back to Public Service at

⁷ The City of Boulder is part of Public Service's "Smart Grid City" project. AMI meters were installed at residences throughout the project area at or about the same time.

regular time intervals (i.e. hourly). The AMI meter at the Residence transmits this information over a cable connection rather than by radio signal.

- 22. AMI meters emit EMF, though not constantly and at much lower levels than radio frequency transmitters.
- 23. Since February, 2005, electric utility service at the Cabin has been measured by a digital meter connected to an Encoder-Receiver-Transmitter (ERT) also knows as an Automatic Meter Reading (AMR) device. The AMR device communicates data about electric usage back to the utility using radio frequency.⁸
- 24. Ms. Gold testified that the electric meter at the Cabin did not feature any type of AMR device prior to February, 2012. However, the ALJ found Hearing Exhibit No. 54 to be more persuasive. That billing record for the Cabin showed February 24, 2005, as the date of the last meter installation and a series of meter readings progressively counting toward the number shown in the photograph of the Cabin meter presented by Ms. Gold (Hearing Exhibit No. 2).
- 25. When a new meter is installed at a property it is set at zero. Based on the usage pattern at the Cabin shown over seven years in Hearing Exhibit No. 54, the ALJ finds that it is not possible that Ms. Gold used 3,565 kilowatt hours between February, 2012, (when she maintains the meter was installed) and the date on which the photo in Hearing Exhibit No. 2 was taken only a few weeks later. This fact also supports the finding that the digital meter shown in Hearing Exhibit No. 2 was not installed in February, 2012.

⁸ This information can be received at a central office or by a specialized vehicle driven through the neighborhood.

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26. Hearing Exhibit No. 4 shows a property near Ms. Gold's Cabin in Riverside equipped with an electromechanical meter with spinning dials as of April 21, 2012. Mr. Nordell established that while the meter depicted is not digital like the one at the Cabin, it nonetheless includes and AMR module that permits remote readings. Therefore, this type of installation emits the same type of radio frequency as the meter at the Cabin.

27. Over time Public Service has added AMR modules to electric meters to increase efficiency and reduce costs associated with obtaining meter readings. Public Service no longer employs personnel who physically walk up to meters to obtain readings in Colorado.

III. <u>DISCUSSION AND CONCLUSIONS</u>

A. Motion to Supplement

- 28. The purpose of the Motion to Supplement is to include additional information in the record which Ms. Gold believes contradicts the evidence and findings regarding the date on which a digital AMR meter was installed at the Cabin. She states that she was surprised at the testimony of Public Service witnesses to the effect that the AMR meter was installed at the Cabin in February, 2005, rather than February, 2012. In part, her understanding of the position to be taken by Public Service at the hearing derives from a statement she noted in Public Service's Answer filed on February 17, 2012. At page 4 of the Answer, Public Service maintained that "[t]here is no smart meter at the Cabin."
- 29. As the proponent of a Commission order granting the Motion to Supplement, Ms. Gold has the burden of establishing that the additional evidence proffered should be included in the record to redress a reasonable mistake, inadvertence, surprise, or excusable neglect on her part. 4 CCR 723-1-1500; C.R.C.P 60(b).

30. The hearing in this matter was moved back twice to accommodate Ms. Gold's schedule and availability. At the time of the hearing the ALJ determined that Ms. Gold was ready to proceed with her case and advised her of her right to be represented by counsel if she so chose. She also indicated that she understood her right to present evidence, cross-examine evidence presented by Respondent, and argue in favor of the relief she sought by the Complaint.

- 31. Reviewing the statement from the Answer referenced by Ms. Gold, the ALJ finds that it is not ambiguous or confusing. During the hearing, Public Service witnesses and counsel took care to distinguish between AMR meters and AMI meters. AMI meters, which are often referred to as "smart meters" were installed within the City of Boulder as part of a larger project affecting thousands of residential customers. This project did not extend to Riverside where the Cabin was located and there is no indication in the record of an AMI meter being installed at the Cabin.
- 32. In the Motion to Supplement, Ms. Gold states, "It came as a surprise to me on May 3, 2012 at the hearing when Xcel represented that this digital Itron Smart Meter CISR had been on my cabin since 2005."
- 33. The Answer accurately and adequately apprised Ms. Gold of the position to be taken by Public Service with regard to the type of metering equipment present at the Cabin. With regard to the timing of the installation of the AMR meter at the Cabin, Ms. Gold was afforded the opportunity to cross-examine Public Service testimony pertaining to Hearing Exhibit No. 54 on this point and did so.

34. Her statement quoted in Paragraph No. 31 above reflects her own confusion regarding the "smart meter" terminology although the ALJ finds the record to be abundantly clear about the distinction between the types of meters referenced in the course of the hearing.

35. The ALJ will deny the Motion to Supplement. Ms. Gold failed to demonstrate that the record is unclear or that her "surprise" was the result of inconsistency between the pleadings and the evidence presented by Public Service. The ALJ understands that Ms. Gold disagrees with the testimony regarding when an AMR meter was installed at the Cabin, but does not find justification to re-open the evidentiary record on that point.

B. Substance of Complaint

- 36. Pursuant to Commission Rule 1500, Ms. Gold also bears the burden of establishing that she is entitled to an order granting her the relief sought in the Complaint.
- 37. The relief sought here is to have Public Service remove the meters at the Residence and the Cabin and replace them with electromechanical meters that do not include a radio transmitter device.
- 38. Ms. Gold established that she has been very diligent to remove sources of EMF that she has identified in her two properties to reduce the health effects associated with her hypersensitivity. She views the electric metering devices as a cause of her health effects and is frustrated by the fact that she has not been able to have them removed.
- 39. Ms. Gold presented substantial evidence that non-thermal effects of EMF exposure are gaining recognition, although as noted Federal health and safety agencies have not yet promulgated guidelines related to such exposure.

40. Ms. Gold's request that her meters be swapped out for older models may appear at first glance to be simple and to impose a relatively small burden on Public Service. However, as noted above, Public Service only installs meters with AMR modules and no longer employs "walk-up" meter readers in Colorado. Thus, to accommodate Ms. Gold's request would require Public Service to develop a metering program for her that is different from that available to all of its other customers in this state.

- 41. As Colorado does not have any specific "opt-out" rules allowing customers to choose what type of metering will be used at their premises, the ALJ is required to determine whether the health effects Ms. Gold experiences warrant the removal of the AMI and AMR meters at her properties and the implementation of a unique metering program for her.
- 42. The ALJ finds that the record in this Docket does not establish that the referenced meters are the cause of Ms. Gold's health effects. This conclusion is based primarily on the lack of connection between the onset of her symptoms in late 2011 and early 2012, on the one hand, and the dates of installation of the metering devices at her two properties in 2005 and 2008 on the other hand.
- 43. Hearing Exhibit No. 1 is of little value in this analysis. Although Ms. Gold's physician references her sensitivity to electromagnetic energy, his conclusion that the installation of meters at her respective properties have "disrupted her life and caused her [health effects]" does not take into account the substantial time gap between the installations and her symptomology. The doctor provides no factual support for his conclusion that the subject meters are the cause.

44. As with many by-products of "progress" the possible adverse effects of EMF may be better understood in the future. Ms. Gold described the emergence of scientific concerns related to EMF exposure and convincingly established her own extreme sensitivity to EMF. But the record makes clear that EMF is all around us in our electrified society. What Ms. Gold did not prove is that the extremely low levels of EMF emitted by the AMI meter at her Residence and the periodic radio frequency emissions of the AMR meter at the Cabin are causing her health problems. If they were, she would have experienced the effects as early as 2005 at the Cabin and 2008 at home.

- 45. Based on the lack of any causal relationship between the installation of the respective meters and the onset of Ms. Gold's health effects, the ALJ finds that the administrative and logistical burdens of replacing the meters with outdated models and establishing a completely separate metering program for Ms. Gold are not warranted. Accordingly, the Complaint will be dismissed.
- 46. Pursuant to § 40-6-109(2), C.R.S., the Administrative Law Judge recommends that the Commission enter the following order.

IV. ORDER

A. The Commission Orders That:

- 1. The Motion to Supplement the Record and Proffer of Tendered Evidence filed by Complainant Susan Gold and amended on May 14, 2012, is denied.
 - 2. The Complaint in this matter is dismissed.
 - 3. Docket No. 12F-113E is now closed and all scheduled proceedings are vacated.

4. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

- 5. As provided by §40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.
 - a) If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the decision is stayed by the Commission upon its own motion, the Recommended Decision shall become the decision of the Commission and subject to the provisions of §40-6-114, C.R.S.
 - b) If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in §40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the administrative law judge and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

6. If exceptions to this Decision are filed, they shall not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.



ATTEST: A TRUE COPY

Doug Dean, Director

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

KEITH J. KIRCHUBEL

Administrative Law Judge