

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Filed – January 5, 2010

PROVIDENCE, S.C.

SUPERIOR COURT

THE NARRAGANSETT ELECTRIC :
COMPANY d/b/a NATIONAL GRID :
 :
v. :
 :
SAMUEL ZIRA, ROCHELLE ZIRA and :
CITY LIMITS AUTO SALES, INC. :

PC-2004-0796

DECISION

GIBNEY, J. This matter comes before this Court for decision following a non-jury trial that was initiated by the Narragansett Electric Company (“NEC” or “Plaintiff”)¹ against Defendants Samuel Zira, Rochelle Zira (“Ziras”), and their business, City Limits Auto Sales, Inc. (“City Limits”). NEC’s Complaint states that Defendants owe on two book accounts for electricity (Counts I and II), and further alleges conversion (Count III) and unjust enrichment (Count IV) against the Ziras and/or City Limits. In total, NEC seeks \$63,115.37 plus costs, interest and expenses from the Defendants to compensate them for Counts I through IV.² Of this total amount, NEC seeks \$16,622.58 from Samuel and Rochelle Zira jointly and severally. This Court has jurisdiction pursuant to G.L. 1956 § 8-2-14 and renders its decision in accordance with Rhode Island Superior Court Rule of Civil Procedure 52.

¹ NEC is a subsidiary of National Grid USA, but officially changed its name to National Grid in or about 2005. See, e.g., Grady v. Narragansett Elec. Co., 962 A.2d 34, 36 n.1 (R.I. 2009) (“The Narragansett Electric Company currently does business as ‘National Grid.’”).

² NEC’s Complaint also requested punitive damages (Count V); however, because the Ziras have not been charged with or found guilty of criminal larceny, this Court holds that punitive damages are inappropriate in this case. See G.L. 1956 § 9-1-2 (“whenever any person shall be guilty of larceny, he or she shall be liable to the owner of the money or articles taken for twice the value thereof, unless the money or articles are restored, and for the value thereof in case of restoration”).

I
Factual Findings and Travel

This dispute arose following NEC's alleged discovery of meter tampering at the Ziras' business, City Limits, and their house. NEC argues that City Limits and the Zira household consistently received more electricity than the amounts reflected in their monthly bills since 1990 and 1987, respectively. During a two-day, non-jury trial on March 3 and 4, 2009, NEC presented three witnesses and eighteen exhibits. The Ziras submitted six exhibits to this Court and examined the three witnesses called by NEC. The Ziras did not present any additional witnesses. Subsequent to trial, both parties submitted post-trial memoranda. Based on the testimony and evidence, this Court makes the following findings.

A
The Zira Properties

In 1986, Samuel and Rochelle Zira ("the Ziras") built a colonial style house at 1776 Snake Hill Road, Chepachet,³ Rhode Island ("house"). (S. Zira Resp. to Pl.'s Interrog. #1, 2); (Trial Tr. 1:24–2:20 Mar. 3, 2009.) They own their house as tenants by the entirety. (S. Zira Resp. to Pl.'s Interrog. #1.) The Ziras and their three children were the first residents to live in the house. (S. Zira. Resp. to Pl.'s Interrog. #1, 2, 3.) Other Zira relatives temporarily resided with the family during the early 1990's, 1997, and after 2003 for periods of less than one year. (Trial Tr. 4:22–5:10 Mar. 3, 2009). The two-floor house has an unfinished basement, three bedrooms, a kitchen, family room, living room, dining room, and a two-car garage. (Trial Tr. 2:22–3:3 Mar. 3, 2009.) Although it was not stated at trial, this Court infers that the house also has at least one bathroom. In total, the house is 3326 square feet. *Id.* at 2:4–6. Since its original

³ NEC's memoranda and some of the Ziras' memoranda indicate that the house is located in Glocester, Rhode Island. Though Glocester is accurate, the property technically is situated in Chepachet, a village within the Town of Glocester. See Our Town: Glocester, RI, <http://www.glocesterri.org/ourtown.htm> (last visited Nov. 30, 2009).

construction, no major electrical, plumbing, mechanical, or carpentry upgrades have occurred at on the premises. (S. Zira. Resp. to Pl.'s Interrog. #10); (Trial Tr. 3:17–25 Mar. 3, 2009.)

From March 1986 to date, the Ziras contracted with NEC d/b/a National Grid to supply their house with electricity. Id. at 2:10–15. The house's meter panel powers the

internal and external lights, the running of the refrigerator, washer, certain parts of the gas operated dryer, the dishwasher, all televisions, a compactor, a microwave, and [in later years,] computer[s]. Additionally, approximately in the summer of 2003 . . . [the Ziras installed] a refrigerator and food freezer in [their] garage and . . . two dehumidifiers for [their house]. (S. Zira. Resp. to Pl.'s Interrog. # 22); (Trial Tr. 6:9–7:4 Mar. 3, 2009).

The house is not cooled by central air conditioning, but does have ceiling fans. (Trial Tr. 7:5–6 Mar. 3, 2009.) There also are two electric garage door openers and a well pump connected to the house's electrical meter. Id. at 7:6–12. The Ziras' house is "heated by hot water baseboard heat, fuel[ed] by oil, [and a] wood stove." (S. Zira. Resp. to Pl.'s Interrog. # 23.)

In addition to the house on 1776 Snake Hill Road, Samuel Zira is also the owner, sole shareholder and president of City Limits, a used car dealership located at 758 Hartford Avenue, Johnston, Rhode Island. (City Limits Resp. to Pl.'s Interrog. #1, 2); (Trial Tr. 8:17–25 Mar. 3, 2009.) Samuel Zira has owned and operated City Limits at the Hartford Avenue location since February 1990.⁴ (Trial Tr. 8:22–9:3 Mar. 3, 2009.) The Ziras also own the entire, cement-block building that houses City Limits, but rent some of the building's garages to tenants who arrange for their own electrical metering. Id. at 9:6–13. No major electrical upgrades have occurred at the business since it first opened in 1990. (City Limits Resp. to Pl.'s Interrog. #22.) The business hours at City Limits are weekdays 9 a.m. until 7:30 p.m., plus eight hours on Saturdays. (Trial Tr. 16:2–9 Mar. 3, 2009.)

⁴ During his trial testimony, Samuel Zira stated that his wife, Rochelle, co-owns City Limits, but did not indicate whether she was involved with its operations. (Trial Tr. 8:22–9:3 Mar. 3, 2009.)

From February 1990 to date, Samuel Zira contracted with NEC d/b/a National Grid to supply City Limits with electricity. Id. at 9:22–10:10. As president of City Limits, Samuel Zira’s duties did not include regular management of the monthly electrical bill payments. Id. at 14:22–15:12. Instead, City Limits’ accountant or Samuel Zira’s nephew, Scott Bergantino, who is a City Limits employee, completed this task. Id. NEC billed City Limits for the two meter panels that power the business—one that supplies electricity to the two City Limits offices and one that powers the single garage used by City Limits. Id. at 10:10–18. The meter for the offices measures the electricity supplied to the interior lights, the eight to ten high-powered-sodium exterior lights, two small air conditioners, a computer, two air fans, and the security cameras. (City Limits Resp. to Pl.’s Interrog. #25); (Trial Tr. 11:3–12:12 Mar. 3, 2009.) The meter for the garage registers the electricity used to power the car lift, an apartment size refrigerator, an air compressor and a washer and dryer. (Trial Tr. 12:19–14:3 Mar. 3, 2009.) The City Limits building is heated by natural gas. (City Limits Resp. to Pl.’s Interrog. #25.)

B
NEC’s Investigations and Loss Calculations
1
NEC’s Experts

On March 3 and 4, 2009, this Court heard testimony from NEC’s two witnesses, Frederick Whaley and Kenneth Wood. Defendants did not lodge a formal objection to NEC’s witnesses during their trial testimony.

Frederick Whaley (“Mr. Whaley”) is a retired, former employee of National Grid with over thirty years experience in the electric metering services field. (Trial Tr. 27:6–28:23 Mar. 3, 2009.) National Grid most recently employed Mr. Whaley in its Revenue Protection Department, a position he held from 2002 until his retirement in 2009. Id. His primary job function was to oversee a group of six NEC employees who investigate service theft. Id. Mr.

Whaley personally reviewed the revenue loss calculations involved in the Zira matter and confronted Samuel Zira with these findings. Id. Based on his training and experience, this Court found Mr. Whaley qualified to discuss electrical metering theft, the installation of check meters, and the application of the industry standard for lost revenue calculations.

Kenneth Wood (“Mr. Wood”) is a current NEC d/b/a National Grid employee with twenty-one years experience conducting electrical shop work and fieldwork, including testing and calibrating meters, installing check meters, calculating unbilled kilowatt-hours, and investigating low use, zero use and tampering at commercial, industrial, and residential locations. Id. at 42:6–44:22. Mr. Wood did not graduate from college, but did receive apprenticeship-like training for these duties from NEC supervisors, id., and attended seminars on the industry standard for calculating lost revenue. Id. at 45:1–46:13; (Trial Tr. 96:17–25 Mar. 4, 2009.) Mr. Wood personally investigated the Zira house and City Limits for electricity theft and reviewed his calculations with Mr. Whaley. (Trial Tr. 45:1–46:13 Mar. 3, 2009.) Based on his training and experience, this Court found Mr. Wood qualified to discuss his investigations, calculations and conclusions related to the two Zira properties.

Even if Defendants had timely objected to their opinion testimony, this Court still found that Mr. Whaley and Mr. Wood compellingly and credibly described NEC’s investigation at the Zira properties and the method NEC used for calculating the revenue lost from the alleged meter tampering at the Zira house and business. Conversely, this Court was unimpressed by Samuel Zira’s testimony regarding the alleged meter tampering, which was neither credible nor compelling.

Timeline of NEC's Investigation

Tampering at City Limits was discovered during a routine electric meter upgrade. (Trial Tr. 34:13–25 Mar. 3, 2009.) In the early 2000's, NEC began replacing its standard meters with updated versions readable by remote radio signal. Id. at 33:2–24. The standard meters were read by human “meter readers,” who personally visited NEC-serviced properties to record electricity usage and look for any irregularities with the meters. Id. When the Ziras first connected their house and City Limits to the grid in March 1986 and February 1990, respectively, NEC installed standard meters at both locations. Id. at 61:23–62:3; 81:3–6. From their installation until the standard meters were removed from service, NEC's meter readers did not report any irregularities with either meter. Id. at 37:18–25.

It was not until August 2001, when NEC took City Limits' standard meter offline for the radio transceiver upgrade, that NEC's retrofit center noticed evidence of tampering. Id. at 46:14–47:11. According to protocol, NEC's retrofit center sent the City Limits standard meter to Mr. Wood for further investigation. Id. at 47:22–48:9. Mr. Wood observed that the City Limits meter had a broken T-seal⁵ and a straightened paper clip inserted into the registration disk. Id. at 48:13–25. The paper clip stopped the rotation of the disk, which prevented the meter from registering and billing electricity usage, but did not impede the actual delivery of electricity. Id. at 48:13–49:12. With his suspicions raised, Mr. Wood requested the entire billing history for the City Limits meter and, in March of 2002, personally inspected the new radio signal meter that was installed at the City Limits location after the standard meter was taken offline. Id. at 49:17–51:6. Mr. Wood observed that the new meter at City Limits also had a broken T-seal, a

⁵ A T-seal connects the meter's outer glass covering to the meter's base. Once the T-seal is breached, it cannot be reconnected. A breached T-seal indicates that the inner workings of the meter may have been accessed. (Trial Tr. 48:14–25 Mar. 3, 2009.)

compromised padlock, and a paper clip inserted into the registration disk. Id. at 51:7–20. City Limits’ tampered meter was left in place by Mr. Wood to facilitate the next part of NEC’s investigation—determining how significantly the tampered meter was underreporting electricity usage at the Zira business. Id. at 56:6–16.

After discovering a second meter tampering at the City Limits property, Mr. Wood expanded his investigation of the Ziras to their house on 1776 Snake Hill Road. Id. at 53:24–54:3. In June and July of 2002 and May 2003, Mr. Wood examined the house meter and found that similar to the two City Limits meters, it also had a broken T-seal, a compromised padlock and a piece of fishing line inserted through the registration disk. Id. at 54:10–16; 78:6–17; (Trial Tr. 96:4–13 Mar. 4, 2009.) Mr. Wood ordered the billing history for the Zira house and proceeded to have a check meter installed at both Zira properties—City Limits and the Zira house. Id. at 55:3–20. He explained that a check meter is installed on the utility pole that supplies the building with power and “monitor[s] [the electricity] actually being delivered to th[e] building as opposed to what’s registering on the building[’s billing] meter.” Id. at 54:19–25; 31:5–11. A comparison of the check meter’s registry to its respective billing meter registry determines whether the billing meter is properly recording the true amount of electricity delivered to the property. Id. at 30:1–9; 30:23–31:4. The City Limits check meter was installed in June 17, 2002 and remained in place until May 21, 2003. Id. at 55:21–56:3; Pl.’s Ex. 4. The Zira house check meter was installed on July 1, 2002 and remained in place until May 21, 2003. Id. at 78:2–6; Pl.’s Ex. 10.

3
Calculating NEC's Lost Revenue
a
City Limits' Unbilled Electricity

During the trial, Mr. Wood explained that the method he applied to the instant case for calculating unbilled electricity and lost revenue has not changed in the twenty-one years he has worked for NEC d/b/a National Grid or the two predecessor companies to NEC. Id. at 45:14–25. Mr. Whaley verified that Mr. Wood applied industry standard procedures and calculations to his investigation of the Zira properties. Id. at 28:12–25; 29:19–30:9. According to protocol, Mr. Wood recorded City Limits' check meter registry for almost a full year (June 17, 2002 through May 21, 2003) to establish the seasonal variances in the amount of electricity actually delivered City Limits. Id. at 56:6–16. Mr. Wood then compared the electricity usage data reported by the check meter to the electricity usage reported by City Limits' breached meter. Id. at 57:24–58:3. Mr. Wood also compared the check meter registry and billing records of the other meters servicing Samuel Zira's tenants in the same building.⁶ Id. at 58:10–18. Mr. Wood determined that the City Limits billing meter failed to record 31,469 kilowatt-hours of electricity during the time period when the check meter was connected. Id. at 60:4–20; Pl.'s Ex. 4. This omission indicated to Mr. Wood that the City Limits meter was, in fact, tampered with or at least that City Limits received a significant amount of free electricity between June 2002 and May 2003. Id.

Mr. Wood next deduced how long the tampering had been occurring at City Limits and extrapolated how much free electricity City Limits had received in that time period. Id. at 62:22–64:5. Mr. Wood definitively established that the City Limits meter was not reporting actual electricity usage since at least August 2001, when the first evidence of tampering was

⁶ This fact is important because in June 2003, Mr. Wood calculated a lesser amount of unbilled electricity at City Limits and notified Samuel Zira that City Limits only owed \$14,868.37. Mr. Wood later amended his calculations because they did not exclude the amount of electricity being reported by the four correct meters connected to Samuel Zira's tenants. Once Mr. Wood corrected this error, he concluded that City Limits had actually received \$46,492.79 in free electricity. (Trial Tr. 101:15–103:2; 132:13–23 Mar. 4, 2009.)

discovered by the NEC retrofit center. Id. at 62:25–63:7. However, in accordance with his training and the industry standard, Mr. Wood also examined City Limits’ billing history for evidence of an earlier tampering start point. Id. at 63:7–23. In particular, Mr. Wood looked for changes in use from year to year in the same month, spikes or drops in use, and differences between the check meter’s registry for a certain month compared to the billing history for that same month. Id. at 63:12–64:5. He also highlighted any billing period with especially low electricity use because such low values are virtually impossible for a business that does not have its power shut off entirely or does not have complete meter failure.⁷ Id. at 67:8–16. Mr. Wood determined that City Limits had uninterrupted service from the inception of the business and concluded that any low kilowatt-hour values were caused artificially. (Trial Tr. 67:20–68:7 May 3, 2009); (Trial Tr. 136:20–25 Mar. 4, 2009.) Mr. Wood explained that when a paper clip is inserted into the registration disk, the meter records no electricity at all. (Trial Tr. 88:3–21 May 3, 2009.) Accordingly, any electricity delivered while the paper clip is in place is not billed to the customer. Id. Because City Limits had some electricity billed almost every month, albeit not the true amount delivered, it indicates that the paper clip was removed and reinserted periodically to effect a reduction, but not feign the complete absence of electricity usage. Id.

Mr. Wood concluded his investigation by comparing the total electricity billed in each year from 1990 to 2002 to the billed usage recorded between June 2002 and May 2003. (Trial Tr. 68:11–69:8 Mar. 3, 2009.) Because Mr. Wood ascertained that City Limits’ meter was underreporting the electricity usage from June 2002 through May 2003 (while the check meter was installed), Mr. Wood examined whether previous years exhibited billed electricity values

⁷ If there was complete meter failure, NEC would have been alerted to repair City Limits’ meter because its bills would continue to report zero or close to zero kilowatt-hours until the meter was fixed. In the instant case, however, after a month of zero kilowatt-hours, City Limits’ meter resumed reporting moderate electricity usage without any meter adjustments by NEC personnel. This indicated to Mr. Wood that there was no meter failure and the City Limits meter had artificially reported a zero reading. (Trial Tr. 67:6–16 Mar. 3, 2009.)

consistent with this check meter time period. Id. A year that had billed usage consistent with a period of confirmed tampering (June 2002 through May 2003) indicates that tampering also occurred during the consistent year. Id.; (Trial Tr. 143:10–22 Mar. 4, 2009.) Because Mr. Wood discovered that all years from 1990 onward had billed electricity values consistent with the values billed during the June 2002 through May 2003 tampering period and because there was no indication that City Limits’ energy demands changed since 1990, he deduced that the City Limits meter was underreporting electricity every year from the first date of service. (Trial Tr. 68:11–69:8 Mar. 3, 2009); (Trial Tr. 137:5–139:15 Mar. 4, 2009.) In effect, “the check meter was showing significantly higher usage than the billing meter at any time throughout the billing history.” (Trial Tr. 69:15–18 Mar. 3, 2009.) Mr. Wood also noted that there was a sharp increase in City Limit’s electricity bill between August 2001 (when City Limits’ standard meter was taken offline) and September 2001 (when the new radio signal meter was installed). Id. at 69:22–70:13. Given that the new billing meter recorded a significantly higher amount of electricity for the month, it further indicated that the recently removed standard meter had not been properly reporting electricity usage. Id. at 70:10–13.

After establishing that tampering at City Limits began in 1990, Mr. Wood next determined how much electricity went unbilled since 1990 using the industry standard. Id. at 72:6–73:14. He first calculated the percentage of actually delivered electricity that was billed to City Limits using the check meter data and City Limits’ billing records. Id. For the time period between June 2002 and May 2003, he divided the check meter’s usage registry (electricity actually delivered) by City Limits’ meter usage registry (electricity billed) to establish a ratio of the amount of electricity delivered versus the amount of electricity billed. Id. at 73:5–74:25. This ratio is expressed as follows:

$$\frac{\text{kw}\cdot\text{hrs recorded by check meter (June 2002 - May 2003)}}{\text{kw}\cdot\text{hrs recorded by City Limits billing meter (June 2002 - May 2003)}} = \text{Ratio of } \frac{\text{actual kw}\cdot\text{hrs}}{\text{billed kw}\cdot\text{hrs}}$$

Then, per the industry standard for calculating loss revenue, Mr. Wood multiplied this ratio by the electricity billed for each month between February 1990 and May 2003 and then subtracted out the amount already billed in that month to obtain the amount of unbilled electricity for the subject month. Id. at 74:16–76:3; (Trial Tr. 140:21–141:22 Mar. 4, 2009); Pl.’s Ex. 4. The following two-step equation is an example of this calculation for the month of February 1990:

$$(1) \quad \text{Ratio of } \frac{\text{actual kw}\cdot\text{hrs}}{\text{billed kw}\cdot\text{hrs}} \times [\text{kw}\cdot\text{hrs billed Feb. 1990}] = [\text{actual kw}\cdot\text{hrs used Feb. 1990}]$$

$$(2) \quad [\text{actual kw}\cdot\text{hrs used Feb. 1990}] - [\text{kw}\cdot\text{hrs billed Feb. 1990}] = [\text{unbilled kw}\cdot\text{hrs Feb. 1990}]$$

Over the entire thirteen year service period, Mr. Wood concluded that City Limits was not billed for 418,392 kilowatt-hours of electricity. (Trial Tr. 73:2–74:11 Mar. 4, 2009.)

To complete his calculations, Mr. Wood determined the historical rate NEC d/b/a National Grid charged for a kilowatt-hour of electricity during each month between February 1990 until May 2003.⁸ Id. at 71:21–25. Then Mr. Wood multiplied the monthly unbilled kilowatt-hours by their appropriate dollar rate—keyed to the month and year of service—to determine the dollar value of each month’s unbilled electricity. Continuing with the above example, the following equation presents the value of unbilled electricity for February 1990:

$$[\text{unbilled kw}\cdot\text{hrs Feb. 1990}] \times \left[\frac{\$}{\text{kw}\cdot\text{hr}} \text{ rate for Feb. 1990} \right] = [\$ \text{ value of unbilled kw}\cdot\text{hrs Feb. 1990}]$$

After totaling the cost of each month’s unbilled electricity, Mr. Wood concluded that City Limits had not paid for \$46,492.79 worth of electricity between February 1990 and May 2003. Id. at 76:20–20. Mr. Wood clarified that in calculating the amount of lost revenue, NEC does not examine or consider electricity usage after confronting a customer about alleged tampering.

⁸ NEC’s rates are approved by the Public Utilities Commission. (Trial Tr. 74:21–24 Mar. 3, 2009.)

(Trial Tr. 98:19–100:16 Mar. 4, 2009.) In the Ziras’ case, this confrontation occurred on May 22, 2003. (Trial Tr. 17:12–18:9 Mar. 3, 2009.) Again, following the industry standard, NEC deems that such after-confrontation usage records are unreliable because the customer is aware he or she is being monitored and therefore can adjust his or her electricity use accordingly.⁹ (Trial Tr. 99:9–100:12 Mar. 4, 2009.)

b
The Zira House’s Unbilled Electricity

The Zira house check meter was installed on July 1, 2002 and remained in place until May 21, 2003. (Trial Tr. 78:2–6 Mar. 3, 2009.) Using the same industry standard method detailed above, Mr. Wood compared the check meter usage to the billed usage at the Zira house. Id. at 79:15–80:4. Again he found that the check meter reported a much greater amount of electricity than the house meter reported. Id. at 79:15–80:4. Over the time period that the check meter was installed, Mr. Wood concluded that 9535 kilowatt-hours of electricity were delivered but not included in the Zira’s bills. Id. at 80:1–11; Pl.’s Ex. 10. Mr. Wood then did a month-by-month and year-by-year comparison of the kilowatt-hours billed from March 1987¹⁰ to July 2002 to the billed kilowatt-hours during the check meter period. (Trial Tr. 133:15–134:7 Mar. 4, 2009.) He found these values were consistent, which indicated that tampering had been occurring since at least March 1987. (Trial Tr. 83:19–84:4 Mar. 3, 2009.) He also noted a large increase in billed kilowatt-hours for December 2001, the month immediately following the

⁹ For example, aside from just reducing electricity use, a customer also could “do internal wiring where he swaps any load from [the subject] meter to another meter on location . . . [by] actually run[ning] extension cords from another person’s location or another person’s business on the property to run his equipment.” (Trial Tr. 115:11–21.)

¹⁰ NEC’s archived billing records do not cover dates older than 1987. Accordingly, the billing history for the first year of service at the Zira house is unavailable. The Ziras, however, were receiving and being billed for electricity between March 1986 and March 1987. (Trial Tr. 81:3–8 Mar. 3, 2009.)

installation of the Ziras' new remote-signal electric meter.¹¹ Id. at 82:22–83:4. This also indicated that the recently removed standard meter had been underreporting the electricity delivered to the Zira house. Id. Finally, Mr. Wood observed several months when almost zero kilowatt-hours were billed, seemingly untenable for a family of five living in the house at all times. Id. at 83:18–84:4.

According to the industry standard, Mr. Wood calculated the ratio of check meter versus billed kilowatt-hours at the Zira house during the time period the check meter was installed. (Trial Tr. 92:2–95:8 Mar. 4, 2009.) He then multiplied this ratio by the billed usage for each prior month and subtracted out the amount already billed to determine the number of kilowatt-hours that went unbilled. Id.; Pl.'s Ex. 10. Over the entire period of service at the Zira house—March 1987 through May 2003—161,455 kilowatt-hours were unbilled. (Trial Tr. 93:8–12 Mar. 4, 2009.) Then Mr. Wood multiplied the monthly unbilled kilowatt-hours by the appropriate dollar rate—keyed to the month and year of service—to conclude that the Ziras had not paid for \$16,622.58 worth of electricity between March 1987 and May 2003. Id. at 95:13–24.

4 Confronting the Ziras

On May 22 2003, NEC first notified Samuel Zira that NEC was investigating him for meter tampering at City Limits and the house on Snake Hill Road. (Trial Tr. 17:12–18:9 Mar. 3, 2009.) On this date, three NEC representatives, including Mr. Wood and Mr. Whaley, met with Samuel Zira at City Limits to discuss their allegations and show him some pictures of the alleged tampering. Id. at 18:10–16. During their meeting, the NEC representatives noticed a spool of fishing line in Samuel Zira's office. When asked about the fishing line, Samuel Zira stated that it

¹¹ This Court notes that in November 2001, when the Ziras' house meter was removed and replaced with a new radio signal meter, the NEC retrofit center did not notify Mr. Wood of any evidence of tampering on the Ziras' standard meter. (Trial Tr. 106:2–108:5 Mar. 4, 2009.)

would not be in his interest to provide NEC with a piece of the fishing line at that time. Id. at 18:17–19:6. NEC filed their Complaint against the Ziras and City Limits on February 13, 2004.

II Standard of Review

Rule 52(a) of the Superior Court Rules of Civil Procedure provides that “[i]n all actions tried upon the facts without a jury . . . the court shall find the facts specially and state separately its conclusions of law thereon” Super. Ct. R. Civ. P. 52(a). In a non-jury trial, the trial justice sits as the trier of fact as well as of law. Hood v. Hawkins, 478 A.2d 181, 184 (R.I. 1984). “Consequently, he [or she] weighs and considers the evidence, passes upon the credibility of the witnesses, and draws proper inferences.” Id. The factual determinations and credibility assessments of a trial justice “traditionally [are] accord[ed] a great deal of respect . . . [because it is] the judicial officer who actually observe[s] the human drama that is part and parcel of every trial and who has had the opportunity to appraise witness demeanor and to take into account other realities that cannot be grasped from a reading of a cold record.” In re Anderson, Zangari & Bossian, 888 A.2d 973, 975 (R.I. 2006). Our Supreme Court has recognized that “a trial justice's analysis of the evidence and findings in the bench trial context need not be exhaustive, and if the decision reasonably indicates that [she] exercised [her] independent judgment in passing on the weight of the testimony and the credibility of the witnesses it will not be disturbed on appeal unless it is clearly wrong or otherwise incorrect as a matter of law.” Notarantonio v. Notarantonio 941 A.2d 138, 144–45 (R.I. 2008) (quoting McBurney v. Roszkowski, 875 A.2d 428, 436 (R.I. 2005)); see also Carpenter v. Hanslin, 900 A.2d 1136, 1141 (R.I. 2006).

III
Analysis
A
Admissibility and Credibility of Mr. Wood’s
and Mr. Whaley’s Opinion Testimony

1

Defendants Did Not Properly Object to the Admissibility of NEC’s Witnesses

Defendants’ post-trial memorandum is their first formal objection to the testimony of Mr. Wood and Mr. Whaley. In their memorandum, Defendants argue that the opinions of NEC’s witnesses fall below the standards for experts elucidated by Rules 702 and 703 of the Rhode Island Rules of Evidence.¹² (Def. Post Trial Mem. at 5–7). Specifically, Defendants challenge whether NEC’s opinions regarding the timeframe of tampering and the cost of unbilled electricity are based on a scientifically supported method. Id.

In Rhode Island, expert testimony is “mechanical, scientific, professional or like nature, none of which is within the understanding of laymen of ordinary intelligence, and where the witness seeking to testify possesses special knowledge, skill or information about the subject matter acquired by study, observation, practice or experience.” Narragansett Elec. Co. v. Carbone, 898 A.2d 87, 95 (R.I. 2006) (quoting Morgan v. Washington Trust Co., 105 R.I. 13, 17–18, 249 A.2d 48, 51 (1969)). In addition to qualifying the credentials of the expert witness, the trial justice also must scrutinize the basis of the expert’s opinion to ensure it is supported by a valid science. See Owens v. Silvia, 838 A.2d 881, 891 (R.I. 2003) (stating that the trial justice must determine whether “expert testimony, presented as a scientifically valid theory, is not mere

¹² Rhode Island Rule of Evidence 702 states:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of fact or opinion.

Rhode Island Rule of Evidence 703 states:

An expert’s opinion may be based on a hypothetical question, facts or data perceived by the expert at or before the hearing, or facts or data in evidence. If of a type reasonably and customarily relied upon by experts in the particular field in forming opinions upon the subject, the underlying facts or data shall be admissible without testimony from the primary source.

‘junk science’” and “must ensure that the parties present to the trier of fact only expert testimony that is based on ostensibly reliable scientific reasoning and methodology”) (internal citations omitted).

Mr. Wood’s and Mr. Whaley’s testimony likely falls into the expert category because calculating lost revenue due to meter tampering is not within the purview of most laymen.¹³ Carbone, 898 A.2d at 95. As such, the NEC’s witnesses must be qualified as experts by their “study, observation, practice or experience,” id., and their opinions must have a basis in “ostensibly reliable scientific reasoning and methodology.” Owens, 838 A.2d at 891. Despite these threshold requirements, however, without a proper objection from Defendants prior to trial or during the witness’s challenged testimony, this Court will not exercise its gatekeeping function at this juncture to remove the allegedly prejudicial testimony from the record. See R.I. v. Gardiner, 895 A.2d 703, 713 (R.I. 2006) (holding that “[w]e need not determine whether the failure to follow this procedure [for admitting experts] was prejudicial because defendant failed to make a timely objection to [witness]’s testimony, including his opinion testimony, which was based on his professional experience”); R.I. v. Ashness, 461 A.2d 659, 669 (R.I. 1983) (“When the [prosecution witness giving expert testimony concerning firearms identification] finished his testimony, the defendant moved to strike it, but the trial justice [properly] ruled that the objection was untimely.”); see also Carbone, 898 A.2d at 96 (finding that the Defendants could not argue for the necessity of a Daubert hearing—used to challenge the admissibility of expert testimony—

¹³ This Court pauses to note that our Supreme Court in Carbone was not completely convinced that an opinion describing lost electricity revenue calculations was “expert” testimony. Carbone, 898 A.2d at 95–96 (the Court’s positing that “even if we agreed with defendants that some of [NEC’s Revenue Protection Administrator’s] testimony may be characterized as expert testimony” suggests that the Court did not necessarily agree that the testimony should be so characterized). If an opinion on calculating lost electricity revenue does not require an expert explanation, it follows that this Court would not have to qualify NEC’s witness as experts, nor would this Court have to examine their underlying method of calculation for scientific reliability.

for the first time on appeal because Defendants had not “sufficiently alert[ed] the trial justice of the scientific issue at stake” during the trial).

This Court notes Defendants’ skepticism of NEC’s tampering calculations as evidenced by their cross-examination of Mr. Wood, but finds that Defendants have waived any further evidentiary challenges. Defendants did not formally object to Mr. Wood’s qualifications or to the scientific basis of the industry standard underlying his opinion. During the cross-examination, Defendants confronted Mr. Wood with the lack of written rules for electricity theft investigations, (Trial Tr. at 97:17–22), and then challenged him to verbally list all the tenets for determining the duration of a tampering period, *id.* at 98:2–22. Defendants also questioned Mr. Wood on the soundness of his explanation that NEC’s investigation method does not review post-confrontation billing records because NEC considers such records unreliable. *Id.* at 98:25–99:18. While these questions are all proper cross-examination queries that will aid the factfinder in evaluating the weight afforded to Mr. Wood’s opinion, they do not constitute proper objections to the admissibility of his testimony. See *R.I. v. D’Alessio*, 848 A.2d 1118, 1124 (R.I. 2004) (finding that cross-examination questions revealing that a doctor, who had “studied and understood neuropathology,” “was not a specialist in neuropathology might bear on the weight of her testimony, but not its admissibility”); see also *Carbone*, 898 A.2d at 96 (stating that the rule for evidentiary hearings requires the challenger to present some proof to substantiate his or her claim that the method in question is scientifically invalid). Accordingly, because Defendants did not properly object to NEC’s witnesses during the trial and only presented queries attempting to cast doubt on the industry standard without presenting evidence toward invalidating the industry standard, this Court finds no justification for purging the record of Mr. Wood’s or Mr. Whaley’s opinions.

Mr. Wood's and Mr. Whaley's Opinions Are Credible and Compelling

Even if Defendants had made a proper objection to Mr. Wood's and Mr. Whaley's opinions, this Court still finds that NEC's witnesses were credible and compelling and affords significant weight to their testimony. At the outset, this Court emphasizes that this was a non-jury trial in which the judge-fact-finder enjoys significant deference for her ability to assess witness credibility and afford appropriate weight to testimony. See Carbone, 898 A.2d at 96 (observing that a "trial justice in a jury-waived trial may be afforded great latitude to determine what testimony may be properly characterized as expert testimony"); see also In re Richard A., 946 A.2d 204, 209 (R.I. 2008) (noting the heightened "deference to credibility determinations made by a trial justice sitting without a jury, so long as they are reasonable, logical, and flow from established facts"). In addition, whether a trial justice accepts a witness as an expert explicitly or implicitly, the judge's decision is always afforded great deference. Carbone, 898 A.2d at 95 (explaining that even if the court has not expressly "qualif[ied] a witness as an expert, a trial justice nonetheless may have treated that witness as an expert, justifying our analysis under the deferential standard normally applied to the admission of expert testimony"); see also Raimbeault v. Takeuchi Mfg. Ltd., 772 A.2d 1056, 1061 (R.I. 2001) (stating that "[t]his Court will not disturb a trial justice's ruling on the admissibility of expert testimony absent an abuse of discretion" (quoting Gallucci v. Humbyrd, 709 A.2d 1059 (R.I. 1998))).¹⁴

As stated in the factual findings, this Court found that Mr. Wood and Mr. Whaley have a breadth of experience and training in the electric metering services field. Between the two, they combine for over 50 years of service at NEC, National Grid and the predecessors to these two

¹⁴ Notwithstanding that Defendants did not properly preserve their objection to the admissibility of Mr. Wood and Mr. Whaley's testimony, see supra, this Court establishes that NEC's witnesses are qualified as experts and NEC's calculation method underlying their opinions is supported by "ostensibly reliable scientific reasoning" to warrant this Court finding that these witnesses are credible and compelling. See Owens, 838 A.2d at 891.

utility companies. They also exhibit sufficiently strong skills in the domain of identifying electricity theft. Mr. Wood was trained by senior members of the NEC's Revenue Protection Department to identify meter tampering and attended various seminars on calculating revenue loss using the industry standard. With respect to Mr. Whaley's electricity theft qualifications, he supervised the service theft investigation field staff for seven years prior to his retirement and reviewed the revenue loss calculations in the instant case. Based on their "knowledge, skill, experience, training, or education," this Court qualified both witnesses as experts in the applicable subject matter. R.I. v. Botelho, 753 A.2d 343, 347 (R.I. 2000) (citing R.I. R. Evid. 702) (emphasis added). Though Defendant contends that Mr. Wood did not have a college degree in a program applicable to meter tampering, (Trial Tr. at 96:17–97:4), his training and experience sufficiently justify his expert status. See Botelho, 753 A.2d at 347 (permitting a doctor who had training and experience performing gynecological exams, but who was not licensed in gynecology, to testify about an exam she performed). As such, during the trial this Court implicitly qualified Mr. Whaley and Mr. Wood as experts in electricity theft investigations and lost revenue calculations.

This Court likewise finds that the method for calculating lost revenue that underlies Mr. Wood's and Mr. Whaley's opinions is sufficiently reliable and compelling. In Owens, our Supreme Court explained that:

[f]our non-exclusive factors can be helpful in determining if expert testimony about novel or technically complex theories or procedures possesses scientific validity. They are: (1) whether the proffered knowledge has been or can be tested; (2) whether the theory or technique has been the subject of peer review and publication; (3) whether there is a known or potential rate of error; and (4) whether the theory or technique has gained general acceptance in the scientific community. Owens, 838 A.2d at 891 (emphasis added).

The Owens Court went on to hold that “[s]atisfaction of one or more of these factors may be sufficient to admit the evidence and each factor need not be given equal weight in the analysis.” Id. at 892 (emphasis added).

Here, Mr. Wood and Mr. Whaley’s testimony established that NEC’s investigation and calculation methods are the industry standard and have been for at least twenty-one years. Accordingly, this Court is satisfied that these procedures have gained general acceptance in the applicable community, which in this case is the community of electricity revenue protection. In addition, because the procedure is the industry standard, the facts and data underlying NEC’s opinions are necessarily of the type reasonably and customarily relied upon by revenue protection analysts in the electricity services field. See R.I. R. Evid. 703. Also of note is the fact that the Carbone Court deferred to the trial court’s decision to admit the full opinion of the revenue protection witness in that case. Carbone, 898 A.2d at 96. Carbone’s revenue protection witness was applying the same exact industry standard as Mr. Wood applied to the Ziras’ house and City Limits data. See id. As such, the Carbone Court implicitly vouched for the scientific validity of the standard or at least held that admitting an opinion based on this industry standard is not error.

This Court holds immaterial that the industry standard lacks a published set of rules; publication is only one factor within the Owens Court’s scientific validity test and is not mandatory. This Court also finds it justifiable that the industry standard does not consider the billing statements recorded after customer confrontation. It is persuasive that the amount of electricity billed after confrontation is unreliable because the customer is now aware he or she is being monitored and can change his or her electricity usage accordingly. Finally, this Court is satisfied that no procedure could errorlessly reconstruct past electricity use and the industry standard is the fairest, most accurate way of estimating lost revenue. In fact, the industry

standard has at least twenty-one years of continuous use. As such, this Court holds NEC's expert witnesses and the underlying basis for their opinions are qualified, valid and credible.

B
Book Accounts (Counts I and II)

With respect to the application of witness testimony to the Counts in NEC's Complaint, this Court finds that the resolution of Count I (book account for the Zira house) and Count II (book account for City Limits) necessarily relies on Counts III and IV. Without establishing that the Ziras or City Limits converted or were unjustly enriched by NEC's electricity supply, Counts I and II are in dispute and their values cannot be summarily awarded to NEC. See Johnson v. Howarth, 700 A.2d 612, 612 (R.I. 1997) (stating that the value of a book account cannot be summarily awarded to a plaintiff if there is an "existence of a disputed material issue of fact"). Here, because the Defendants—the Ziras and City Limits—dispute the value of the book accounts, this Court must first examine whether NEC proved conversion or unjust enrichment up to the stated values of \$16,622.58 and \$46,492.79, respectively.

C
Conversion (Count III)

"To maintain an action for conversion, [a] plaintiff must establish that [it] was in possession of the personalty, or entitled to possession of the personalty, at the time of conversion." Narragansett Elec. Co. v. Carbone, 898 A.2d 87, 97 (R.I. 2006) (quoting Montecalvo v. Mandarelli, 682 A.2d 918, 928 (R.I. 1996)). "[T]he gravamen of an action for conversion lies in the defendant's taking the plaintiff's personalty without consent and exercising dominion over it inconsistent with the plaintiff's right to possession." DeChristofaro v. Machala, 685 A.2d 258, 262 (R.I. 1996) (quoting Fuscellaro v. Indus. Nat'l Corp., 117 R.I. 558, 560, 368 A.2d 1227, 1230 (1977)). The Carbone Court settled any ambiguity that electricity is "personalty" capable of being converted when they stated: "We see no persuasive rationale for

holding . . . those whose electricity was wrongly appropriated may not recover the loss of the value of that electricity in a civil action for conversion.” Carbone, 898 A.2d at 98 (emphasis added). Accordingly, NEC’s Complaint against the Ziras and City Limits for electricity conversion states a valid claim. To prove its claim, NEC must show by a preponderance of evidence that (1) NEC was entitled to possession of the electricity at the time of conversion; (2) Defendants took NEC’s electricity without NEC’s consent; and (3) Defendants exercised dominion over the electricity inconsistent with NEC’s right to possession. See id. at 97–98.

In Carbone, a case with the same plaintiff and facts very similar to the instant matter, our Supreme Court affirmed the trial court’s holding that NEC had proven the three elements necessary to show Mr. Carbone had converted NEC’s electricity. Basically, Mr. Carbone took NEC’s electricity without NEC’s consent by engineering “an underground bypass, [to] divert[] the electrical current from [NEC’s] transformer pad into his home.” Id. at 98. The Court held that it was “undisputed that [NEC] originally possessed or was entitled to possess the unbilled electricity that ended up in the Carbone home” and that “Mr. Carbone exercised dominion or control over that electricity by using it in his home to power a portion of his impressive inventory of electrical appliances.” Id.

The instant case presents a variation on the conversion element that requires a “defendant’s taking the plaintiff’s personalty without consent,” but the other two elements are identical to the Carbone case. Analogous to our Supreme Court’s Carbone decision, this Court also holds that NEC was “entitled to possess the unbilled electricity that ended up in the [Zira] home [and City Limits.]” Id. Likewise, the Ziras and City Limits “exercised dominion or control over that electricity by using it in [their] home [and business for] power.” Id. The distinguishing feature of Carbone is that Mr. Carbone used a technically sophisticated way to “take” NEC’s electricity, whereas the Ziras and City Limits opted for the rudimentary paper clip

and fishing line approach. This Court finds that the different “taking” approach used in the instant case is of no effect and holds that Defendants “took [NEC’s electricity] without [its] consent” as required to establish common law conversion.

In addition, this Court is free to reject Samuel Zira’s “anything is possible” argument wherein he claims that he did not tamper with or know tampering was occurring at his home and business. See In re Richard A., 946 A.2d at 209 (noting the heightened “deference to credibility determinations made by a trial justice sitting without a jury, so long as they are reasonable, logical, and flow from established facts”). Suggesting the possibility that his sons, nephew, or some other unidentified intermeddler may have caused the tampering, while he was completely unaware of their nefarious activities, strains reason. (Defs.’ Post Trial Mem. at 3.) NEC’s witnesses established that tampering had been ongoing for years, and each new meter installed on the properties exhibited new evidence of tampering. NEC also presented evidence that Samuel Zira kept a spool of fishing line in his office at City Limits and refused to give NEC’s representatives a sample of the line saying “it would not be in his best interest.” Although NEC’s meter readers did not note indications of tampering during the many years of manual meter recordings at the Ziras’ house and City Limits, this Court found persuasive NEC’s explanation that readers do not painstakingly inspect the meters on each visit, and the obstructing paperclips and fishing lines were not always inserted in the meters. The check meter data and billing usage history show that the industry standard is a reliable and accurate way of establishing the duration and extent of revenue loss. Based on these facts, this Court may reasonably infer there was an intentional design to reap free electricity from NEC, and this scheme was known to the Ziras. See Hood, 478 A.2d at 184 (permitting judges presiding over non-jury trials to make “proper inferences” based on the evidence). As such, this Court will not credit Samuel Zira’s self-serving testimony and holds that NEC has proven the elements of

conversion by a preponderance of the evidence. In addition, this Court holds that NEC has proven conversion damages to the extent requested in its Complaint based on the credible opinion testimony of NEC's revenue protection witnesses.

D
Unjust Enrichment (Count IV)

“Recovery for unjust enrichment is predicated upon the equitable principle that one shall not be permitted to enrich himself at the expense of another by receiving property or benefits without making compensation for them.” Carbone, 898 A.2d at 99. Defendants do not dispute that the Ziras' house and City Limits received free electricity from NEC,¹⁵ but do argue that NEC has not proven by a preponderance of evidence that these properties were unjustly enriched beginning in March 1987 and February 1990, respectively. (Def. Post. Trial Mem. at 5, 11.) Defendants contend that they are only responsible for the unbilled electricity received during the check meter monitoring periods, id. at 11, because the check meter periods are the only time spans when NEC can adequately prove that the billing meters were not properly recording the amount of electricity actually delivered to the premises. Id. at 5. Accordingly, Defendants conclude that any unbilled electricity extrapolated for dates prior to the check meter installations is speculative and simply, junk science. Id. This Court disagrees.

As stated above, even if the Defendants had properly objected to NEC's witnesses, this Court would still hold that Mr. Wood and Mr. Whaley were qualified to testify on matters related to meter tampering and lost revenue calculations—subject areas in which each has significant experience and training. In addition, this Court holds that the industry standard underlying Mr.

¹⁵ As the Defendants do not contest the existence of the unjust enrichment elements in this case, this Court need not discuss them in great detail. (Def. Post Trial Mem. at 5, 11 (“[D]efendants do not contest the fact that the check meters, when in place, demonstrated that the defendants were the beneficiaries of unbilled electric service.”). In brief, this Court does find that (1) the benefit of electricity was conferred upon the Defendants by NEC; (2) Defendants appreciated such benefit by using the electricity without cost; and (3) there was an acceptance of such benefit in that it would be inequitable for the Defendants to retain this benefit without paying for the electricity's value. See Carbone, 898 A.2d at 99 (quoting Bouchard v. Price, 694 A.2d 670, 673 (R.I. 1997)).

Wood's and Mr. Whaley's opinions is "ostensibly reliable" because the method is generally accepted in the field and universally used by utility companies to determine the duration of tampering and the cost of unbilled electricity. Because the NEC has presented an abundance of evidence showing that Mr. Wood adhered to this generally accepted industry standard when calculating the revenue lost from the Zira house and City Limits, this Court holds that NEC has proven unjust enrichment damages to the extent requested in its Complaint.

IV Conclusion

NEC has sufficiently established that the Ziras owe NEC the balance on the residential and commercial book accounts by a preponderance of the evidence. NEC has also established the elements of conversion and unjust enrichment by a preponderance of the evidence. Accordingly, judgment shall enter in favor of the NEC on Counts I through IV. The Ziras and/or City Limits shall pay \$63,137.11, plus the costs, interest and expenses requested by NEC.

Counsel shall prepare an appropriate judgment for entry in accordance with the rulings of this decision.