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Interim Rates Shawn E. Lange MO PSC Staff Interim Rebuttal Testimony ER-2012-0345 August 20, 2012

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

INTERIM REBUTTAL TESTIMONY

OF

SHAWN E. LANGE

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2012-0345

Jefferson City, Missouri August 2012

Date Q-10-12 Reporter 4 File No. FR - 2012

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of The Empire District) Electric Company of Joplin, Missouri) Tariffs Increasing Rates for Electric) Service Provided to Customers in the) Missouri Service Area of the Company)

File No. ER-2012-0345

AFFIDAVIT OF SHAWN E. LANGE

STATE OF MISSOURI)) ss COUNTY OF COLE)

Shawn E. Lange, of lawful age, on his oath states: that he has participated in the preparation of the following Interim Rebuttal Testimony in question and answer form, consisting of $\underline{8}$ pages of Interim Rebuttal Testimony to be presented in the above case, that the answers in the following Interim Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Subscribed and sworn to before me this $\frac{\mathcal{U}^{t}}{\mathcal{U}^{t}}$ day of August, 2012.

SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 03, 2014 Commission Number: 10942086

1	INTERIM REBUTTAL TESTIMONY					
2	OF					
4 5	SHAWN E. LANGE					
6 7	EMPIRE DISTRICT ELECTRIC COMPANY					
8 9	CASE NO. ER-2012-0345					
10 11						
12	Q. Please state your name and business address.					
13	A. My name is Shawn E. Lange and my business address is Missouri Public					
14	Service Commission, P.O. Box 360, Jefferson City, MO 65102.					
15	Q. What is your present position with the Missouri Public Service Commission					
16	6 ("Commission")?					
17	A. I am a Utility Engineering Specialist III in the Engineering Analysis Section,					
18	Energy Unit, Utility Operations Department, Regulatory Review Division.					
19	Q. Would you please review your educational background and work experience.					
20	A. My credentials can be found along with the Commission cases in which I have					
21	filed testimony in Schedule SEL-1.					
22	Q. What Staff witnesses are providing testimony on Empire's interim rate					
23	request?					
24	A. The following witness are providing interim rebuttal testimony on the issues					
25	identified:					
26	• Mark Oligschlaeger – Overview, Revenues, Policy					
27	• Shawn E. Lange – Empire's Customer Numbers, Weather, and Rate					
28	Revenues					
29	Shana Atkinson – Empire's Financial Condition					

Interim Rebuttal Testimony of Shawn E. Lange

Q.

Q.

Lena M. Mantle - Empire's Fuel and Purchased Power Costs

What is the purpose of your testimony?

In their direct testimony filed on July 6, 2012, the Empire District Electric A. Company ("Empire") witnesses discuss Empire's costs and revenues since the May 22, 2011 The purpose of my testimony is to provide information regarding the weather tornado. impacts to revenue and customer counts during the time period since the tornado. I also provide information about changes in Empire customer rates from Empire's last general electric rate case, Case No. ER-2011-0004 that took effect after the tornado and how those rates have impacted Empire's revenues.

When did the rates resulting from Case No. ER-2011-0004 go into effect?

June 15, 2011, a few weeks after the May 22, 2011, tornado. Α.

Q. How did they effect customers?

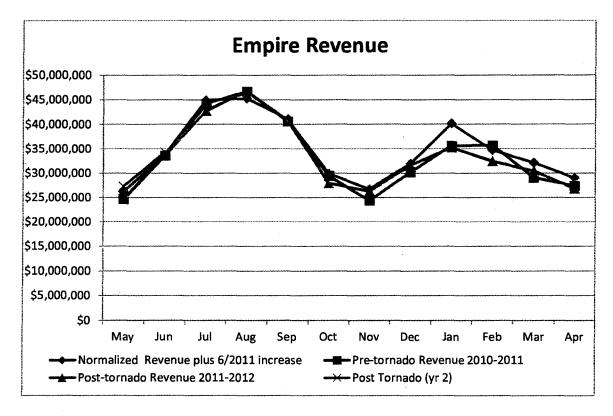
In Case No. ER-2011-004, the new rates were designed to reduce the existing Α. summer-winter seasonal rate differential. Historically, Empire's summer per kWh rates were substantially higher than its winter per kWh rates.

The reduction of the summer-winter differential resulted in Empire's new summer per kWh rates being actually lower than the old summer per kWh rates for the residential, commercial building, and small heating classes, even after including the revenue requirement increase the Commission authorized in that case. Likewise, the new first energy block rates of the total electric building and general power classes were lower than the old summer per kWh rates. In other words, on June 15, 2011, Empire customers' per usage charges were less than they would have been without the rate increase resulting from Case No. ER-2011-0004.

> Does Staff have estimates of Empire's monthly revenues after the tornado? , **Q**.

Interim Rebuttal Testimony of Shawn E. Lange

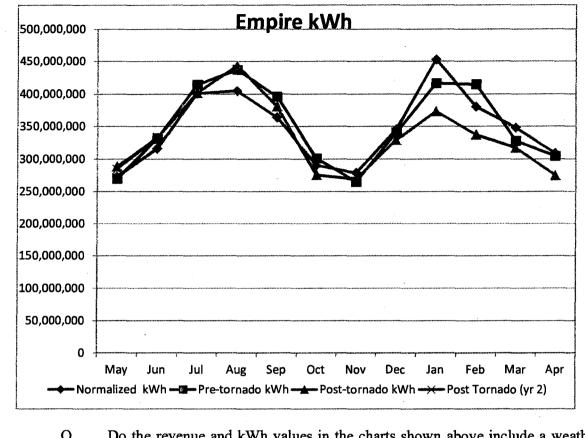
A. Yes. Excluding Empire's Fuel Adjustment Clause ("FAC") revenues, the graph below, and included in schedule SEL-2, illustrates Empire's actual rate revenue since the tornado compared to Empire's normalized rate revenue from Case No. ER-2011-0004. It also illustrates Empire's, actual rate revenue since the tornado compared to Empire's rate revenue before the tornado, adjusted for the rate changes in Case No. ER-2011-0004. These raw numbers appear to indicate that any shortfall in sales Empire may be currently experiencing did not begin until the winter months of 2011-2012.



Q. What do the kWhs show?

A. The graph below, and included in schedule SEL-3, illustrates Empire's actual
kWh since the tornado compared to Empire's normalized kWh from Case No. ER-2011-0004.

Interim Rebuttal Testimony of Shawn E. Lange



Q. Do the revenue and kWh values in the charts shown above include a weather adjustment?

•

Q.

A. No.

Q. Has Staff performed a weather normalization analysis to estimate the weather adjustment to kWh and revenues?

A. Yes, using Empire's weather normalization models and Empire's inputs to those models, provided in Empire's workpapers in this case, Case No. ER-2012-0345, Staff determined and priced out weather and the 365-day adjustments.¹

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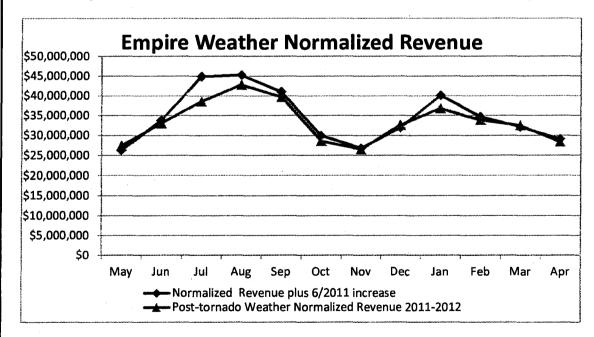
What is the result of this analysis?

¹ Staff has not yet determined the models and inputs that Staff will use for its revenue calculation in the general rate proceeding.

Interim Rebuttal Testimony of Shawn E. Lange

Based on Staff's analysis of the twelve months ending June, 2012, the summer 1 Α. months, comprised of "the first four billing periods billed on and after June 16,"² were warmer than normal. Therefore, Empire's revenues for those months should be adjusted by approximately \$(9,382,248) to weather normalize them. The winter months, comprised of "the remaining eight monthly billing periods of the year,"² were warmer than normal. Therefore Empire's revenues for those months should be adjusted by approximately \$7,485,114 to weather-normalize them. This indicates that Empire's additional revenues from the warmer summer temperatures more than offsets its loss in revenues due to the warmer winter temperatures; netting the two shows Empire received approximately \$1,897,135 in excess of any revenue losses due to the warm winter.

Data for July, 2012³ was not available when Staff performed this analysis. The results 11 12 of this analysis can be seen in the charts below as well as in SEL-4 and SEL-5 respectively.



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2 P.S.C. Mo. No. 5, Sec. 1, 16th Revised Sheet No. 1.

3 The average temperature for the contiguous U.S. during July was 77.6°F, 3.3°F above the 20th century average, marking the warmest July and all-time warmest month on record for the nation in a period of record that dates back to 1895. http://www.ncdc.noaa.gov/sotc/

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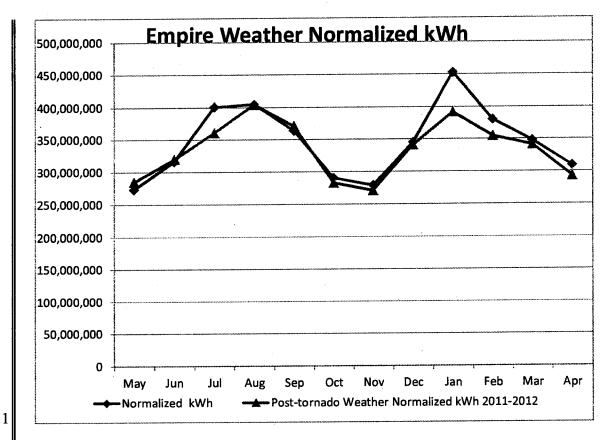
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Q. In the revenue chart above, why is the weather normalized revenue line lower than the normalized rate level from the ER-2011-0004 case?

A. One reason is the normal weather variables used for this analysis is different from the normal weather variables used in Case No. ER-2011-0004. Some years in the history have been added and other years have been removed. Another reason is the change in customer count.

Q. Has Staff estimated how many customers Empire has lost?

9 A. Yes. Staff's preliminary estimate is that Empire has lost approximately 1,104
10 customers from June 2010 to June 2012.

Q. How did Staff make its preliminary estimate?

A. Staff obtained from Empire updated customer counts as of June 2012.
Comparing customer counts as of June 2012 to those of June 2010, the difference is 1,104

Interim Rebuttal Testimony of Shawn E. Lange

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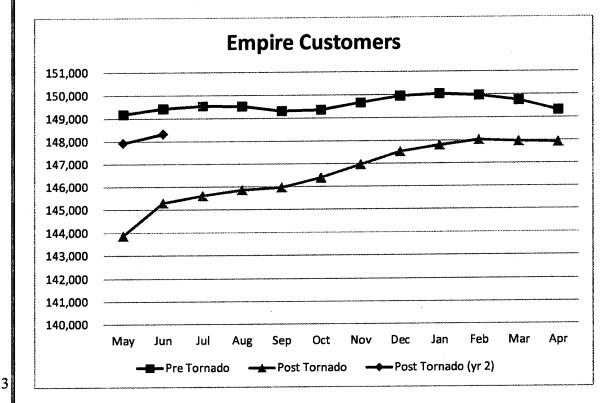
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1 customers. The graph below, also included as Schedule SEL-6, illustrates Empire's monthly



customer counts from May 2010 through June 2012.

Q. Does the customer lost quantification solely reflect the impact of the tornado?
A. While it stands to reason that most of the decrease in customer numbers was caused by the storm, it is unknown how many of the 1,104 customers lost are solely due to the tornado and not attributable to other causes. The 1,104 represents the upper bound on the number of customers lost due to the tornado.

- Q. How has the rebuild from the tornado progressed?
- A. It is Staff's understanding⁴ that:
 - Approximately two-thirds of the 7,500 homes that sustained damage have received building permits.

⁴ http://www.state.ia.us/government/com/util/docs/MARC/Presentations/Kartmann%20-%2020120611.pdf

Interim Rebuttal Testimony of Shawn E. Lange

•	• Currently of the 530 businesses that were directly affected by the tornado, 420				
	have reopened. 28 businesses have indicated they will not reopen and 28 new				
	businesses have opened in their place.				
•	Approximately 300 families, out of the 586 families at peak, are living in				
	temporary housing units provided by FEMA				
	\circ It is anticipated that 1,181 housing units will be completed by early				
	spring 2013 ⁵ .				
Q. Does this conclude your interim rebuttal testimony?					
А.	Yes, it does.				

SHAWN E. LANGE

PRESENT POSITION:

I am a Utility Engineering Specialist III in the Engineering Analysis Section, Energy Unit, Utility Operations Department, Regulatory Review Division.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

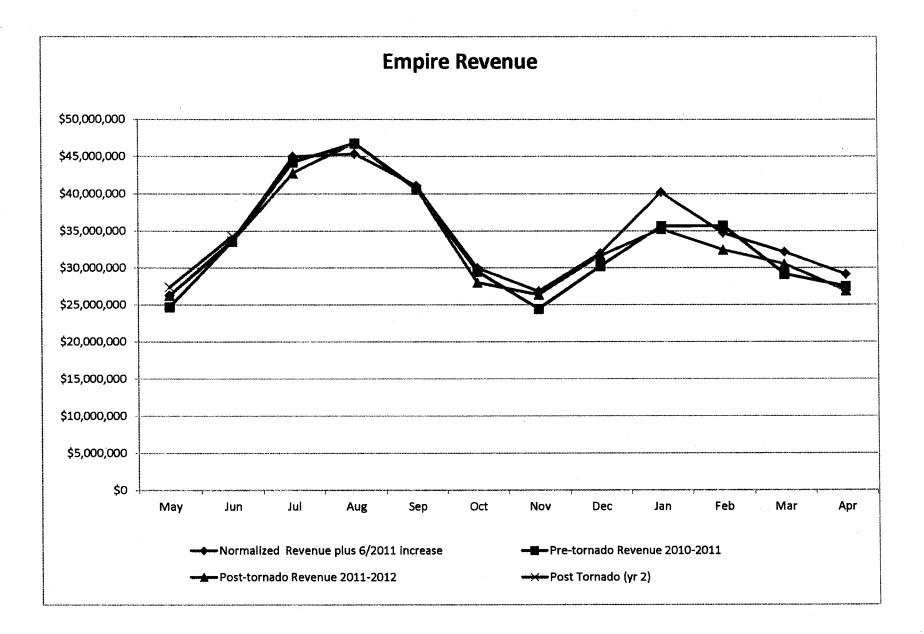
In December 2002, I received a Bachelor of Science Degree in Mechanical Engineering from the University of Missouri, at Rolla now known as the Missouri University of Science and Technology. I joined the Commission Staff in January 2005. I am a registered Engineer-in-Training in the State of Missouri. I have spoke at NCDC's workshop on alternative climate normals.

TESTIMONY FILED:

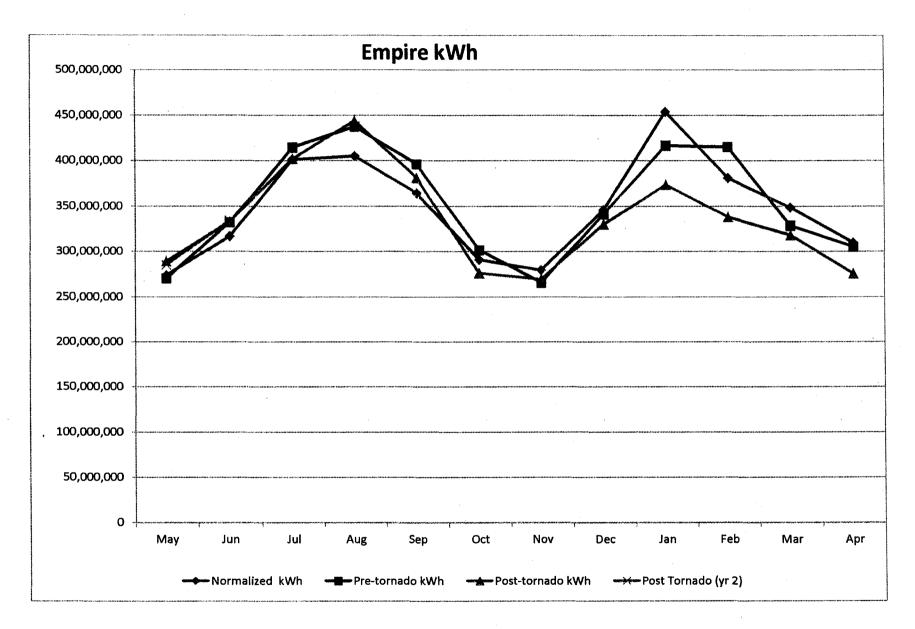
Case Number	Utility	Testimony	Issue
ER-2005-0436	Aquila Inc.	Direct	Weather Normalization
		Rebuttal	Weather Normalization
		Surrebuttal	Weather Normalization
ER-2006-0314	Kansas City Power &	Direct	Weather Normalization
·	Light Company	Rebuttal	Weather Normalization
ER-2006-0315	Empire District Electric	Direct	Weather Normalization
	Company	Surrebuttal	Weather Normalization
ER-2007-0002	Union Electric	Direct	Weather Normalization
	Company d/b/a		
	AmerenUE		
ER-2007-0004	Aquila Inc.	Direct	Weather Normalization
ER-2007-0291	Kansas City Power &	Staff Report	Weather Normalization
	Light Company	Rebuttal	Weather Normalization
ER-2008-0093	Empire District Electric	Staff Report	Weather Normalization
•	Company		
ER-2008-0318	Union Electric	Staff Report	Weather Normalization
	Company d/b/a		
	AmerenUE		
ER-2009-0089	Kansas City Power &	Staff Report	Net System Input
	Light Company		
ER-2009-0090	KCP&L Greater	Staff Report	Net System Input
	Missouri Operations		_
	Company		

Case Number	Utility	Testimony	Issue
ER-2010-0036	Union Electric Company d/b/a AmerenUE	Staff Report	Net System Input
ER-2010-0130	Empire District Electric Company	Staff Report	Variable Fuel Costs
		Surrebuttal	Variable Fuel Costs
ER-2010-0355	Kansas City Power & Light Company	Staff Report	Variable Fuel Costs
ER-2010-0356	KCP&L Greater Missouri Operations Company	Staff Report	Engineering Review- Sibley 3 SCR
ER-2011-0004	Empire District Electric Company	Staff Report	Variable Fuel Costs
ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Staff Report	Net System Input
ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Staff Report	Weather Normalization
ER-2012-0174	Kansas City Power & Light Company	Staff Report	Weather Normalization Variable Fuel Costs

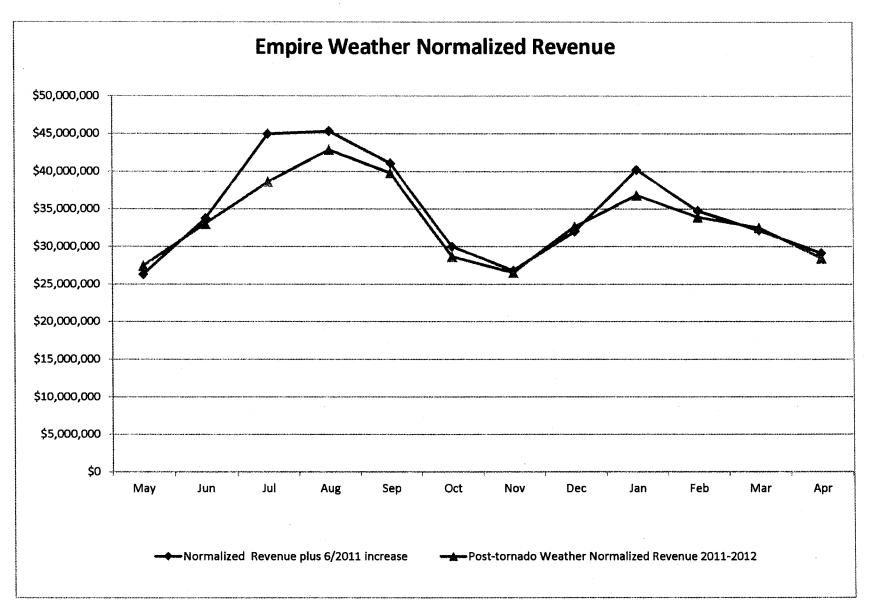
SEL-1 2 of 2



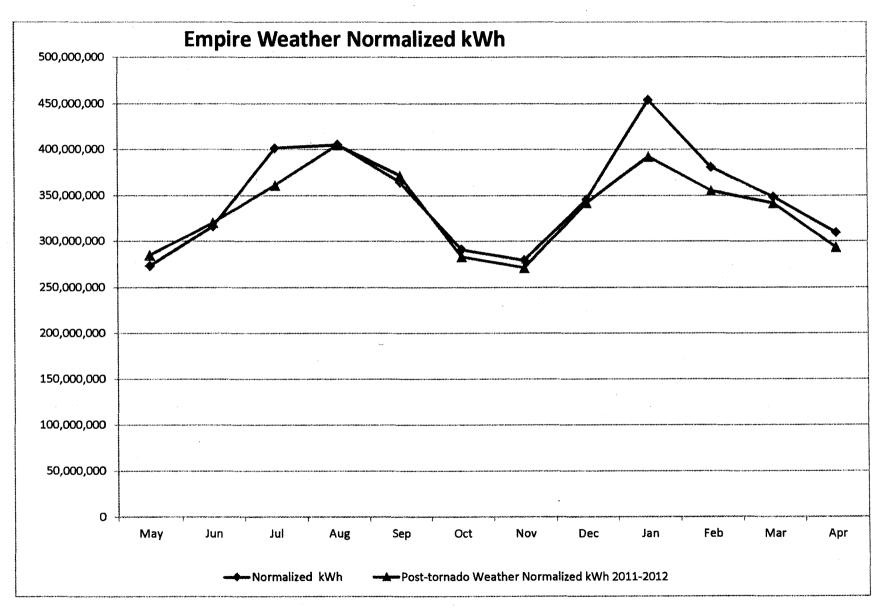
SEL - 2



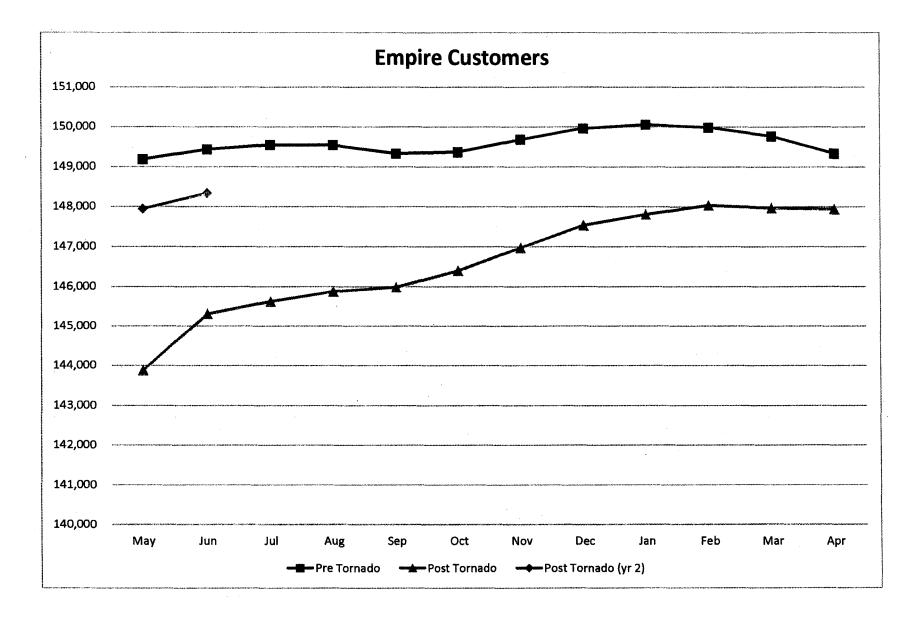
SEL-3



SEL-4



SEL-5





Rebuilding...One Day at a Time

- Building permits issued for almost two-thirds of the 7,500 ۹ homes that were damaged
- Currently 420 of the 530 affected businesses have reopened. 2 Only 28 have indicated they will not rebuild/reopen
- Twenty-eight new businesses have 6 opened
- To date, approximately 300 families are living in temporary housing units provided by FEMA. At the peak, FEMA units housed 586 families



June 2, 2012





<u>Joplin's Muslims celebrate end of Ramadan with</u> <u>Joplin community</u>

Joplin's Muslims celebrated the end of Ramadan — Eid al-Fitr — on Sunday at the Holiday Inn Convention Center. They invited community leaders and leaders of Joplin religious communities to share the celebration.

Search



<u>Almost half of tornado-</u> <u>affected residents have left</u> <u>FEMA housing</u>

Rooms for rent

Debbie Markman, housing director for the Economic Security Corporation, said there are 340 housing units, which were destroyed in the May 22, 2011, tornado, that should be rebuilt by the spring of 2013. Here is her list of 1,181 housing units that recently opened or are anticipated to be complete this year or early next spring:

Plaza Seniors, 1501 Rex Ave., 56 units, to be open this summer.

Plaza Senior 2, 1501 Rex Ave., 20 units, to be open this summer.

Plaza Apartments 1 and 2, 1715 Rex Ave., 174 units, to be open this summer.

Plaza Towers, 1631 Rex Ave., 54 units, to be open in September.

Michigan Place (previously Oak Meadows), 1502 Michigan Ave., 138 units, open.

Casa Grande/Brittany, 2319 S. Texas Ave., 89 units, open.

Bartlett Hills (Joplin Public Housing units), 24th Street and McCoy Avenue, 75 units, to be open this fall.

Par Hill (Joplin Public Housing units), 19th Street

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and Vermont Avenue, 18 units, almost all are open. Mercy Village, 1148 W. 28th St., 65 units, open. Springview Gardens, 1736 W. 22nd St., 80 units, some open, the rest to open this fall.

Murdock Apartments, 21 S. Rhode Island Ave., 44 units, to be open in late October.

Fry Construction, 1800 and 1900 S. Connecticut, 18 units, unknown opening date.

Apartments at 2900 S. McClelland, 28 units, unknown opening date.

Hope Cottages, 32 scattered single-family homes throughout tornado area, four units available each month beginning in November, low-income tax credit.

Delaware Duplex Community, 20th Street and Maryland Avenue, 20 units, four units available each month starting in September.

Union City Homes, scattered single-family detached homes throughout tornado area, 38 units, first unit open in October.

Eagle Ridge walk-up apartments, 611 W. 25th St., 40 units, open in spring 2013.

Parkwood Senior Housing, 1300 N. Range Line, 42 units. open in spring 2013.

Forest Park Apartments, 29th Street and

McClelland, 32 units, first 12 units open December 2012.

Hampshire Terrace II, 2100 Hampshire Terrace, 84 units, open first guarter of 2013.

Canyon Trails, 1300 W. 17th St., 52 apartments and duplexes, open spring 2013.



Savannah Martin packs away her dolls in preparation for a move back into the family's former apartment. Globe | Roger Nomer



Heather Gifford helps her sons, Tommy Morris, 5, and Eric Gifford, 2, play a video game Wednesday in their FEMA trailer. Gifford has been trying to move out of the trailer, but so far hasn't been able to find suitable housing.Globe | Roger Nomer

With her pooch Toi on her lap, Carolyn Lehar reads a newspaper on the front porch of her home at Redwood Gardens. Lehar returned to the

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http://www.joplinglobe.com/local/x1968180907/Almost-half-of-tornado-affected-residents... 8/19/2012



apartment after living 10 months in a Federal Emergency Management Agency trailer.Globe | Roger Nomer

(http://www.joplinglobe.com/local/x1968180907/Almost-half-of -tornado-affected-residents-have-left-FEMA-housing)

By Andra Bryan Stefanoni astefanoni@joplinglobe.com (http://www.joplinglobe.com)

JOPLIN, Mo. — The trailer occupied by the Billy Martin family has almost been emptied of all possessions.

Theirs is one of 194 units in Officer Jeff Taylor Memorial Acres provided by the Federal Emergency Management Agency to those who had lost homes in the May 22, 2011, tornado.

Now, 100 trailers remain in that FEMA "neighborhood." In all, there are 301 households occupied in the 13 FEMA sites set up in the area. That's down from 586 households.

Much has changed for the Martin family in the past year. The Martins not only lost their home to the tornado, but Billy Martin lost his job as a dishwasher at Casa Montez after it too was destroyed. His wife, Terri, fought a bout with depression, and 8-year-old Savannah was struggling in school.

But the Martins had one main objective after the tornado: They planned to return to Springview Garden Apartments at 22nd Street and Michigan Avenue by this summer — providing it had been rebuilt.

It has, and on Monday the Martins will move back home.

"The only difference will be our address, which was 1726 W. 22nd, but now will be 1736 W. 22nd Apt. 1, Building 2," said Terri Martin, who already has it memorized.

The Martins also have succeeded in rebuilding other areas of their lives. When Casa Montez reopened, Billy Martin returned to his job and was promoted to prep cook, which included a raise. The added funds have prompted him to consider one day applying for a Habitat for Humanity home.

Terri Martin was aided by charitable organizations in getting a pair of eyeglasses, and successfully completed her driver's license examination.

Using their income tax return, they purchased a friend's old van for \$500, giving them more freedom through mobility. And Billy doesn't have to ride his bike the 20 miles round trip to work unless he feels like it. Savannah, who improved her grades with the help of her family and teachers, is now focused on decorating her new room using a princess and Barbie theme.

"I'm going home," she said as she showed off a box of dolls last week that she had carefully packed.

Billy Martin is looking forward to celebrating his birthday and their wedding anniversary in their own place on June 22.

"Some might look at what we've done as small things, but to me they were major accomplishments,"

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said Terri Martin. "We know we can accomplish anything now. We have come a long way."

She credits representatives from agencies like Catholic Charities and Salvation Army with connecting the family to resources.

Challenges beyond housing

Those resources have played a key role in the success of those seeking to leave the temporary FEMA housing, according to Barb Sturner, an external affairs specialist with FEMA's Region VII office in Kansas City.

Sturner has been to Joplin numerous times since last summer and has observed first-hand underlying issues that prevent individuals or families from obtaining housing.

"We're very focused, as we have been, on making sure each family is pursuing viable housing options and if they're not, or there is an impediment to that, like access to transportation in order to get to a job, we're going to hook them up with disaster case management to look at their unique situation," Sturner said.

Reasons vary greatly. Perhaps they don't have enough in savings to pay the first and last month's rent in advance as many apartments require. Perhaps they own a pet that survived the tornado, too, but can't find an apartment that allows animals. Perhaps they are without health insurance and are putting all available cash toward medicine.

Volunteer agency liaison Jono Anzalone, who works with Joplin agencies to find longer term sustainable housing solutions for individuals and families, said that while FEMA provides numerous resources, "time and time again, that simply is not the long-term holistic recovery that individuals and households need after a disaster."

"So many times, people really do think recovering from disaster is about housing and only housing. There are so many health and social service aspects not even thought about by the community until a year plus," Anzalone said.

That's why partnerships among agencies affiliated with the LTRC and Jasper County Community Organizations Active in Disaster have proven so vital, he said.

Demand for rentals

The fact remains, though, that apartments are in demand. At the peak of the housing effort, 586 individuals and families were provided temporary homes. Of those, 536 had been renters.

"There was really an appetite right after the tornado for volunteers rebuilding houses; what was really lacking from the dialogue was what to do about rentals. Only 50 of the 586 in the units had been homeowners," Anzalone said.

By last week, 285 households had moved out and into long-term or permanent housing. Their FEMA units were moved to a staging area in Neosho for holding until they are auctioned; the Martins' trailer will join them this week.

That leaves 301 households still living in temporary units, Anzalone said; of those, 217 are at the three community sites and the rest are spread among the 10 commercial sites.

Sturner, the FEMA specialist, said that it's difficult to provide specifics on where they moved to.

"They are not required to tell us where they're going. There is a process for them to leave in that they have to sign out and hand over their keys, and maybe they say where they're going, but we don't do a site visit to verify they're actually there," she said. "We just don't have reliable data we can provide on that."

Heather Gifford is among those still waiting for a home.

She and her husband, Todd Gifford, and their sons, Tommy Morris, 5, and Eric Gifford, 2, lost their home when the Oak Meadows Apartments in the 1500 block of South Michigan Avenue were heavily damaged.

The family has been living in a FEMA temporary housing unit on Fountain Road, where 27 units still remain of the original 53. A 138-unit affordable housing complex on South Michigan Avenue has been built to replace their former home at Oak Meadows, but the Giffords won't be among those moving in.

"My husband had been laid off, but got his job back, so now we have too high an income for Oak Meadows," Heather Giffords said. "We're just searching, but there's not a whole lot (available)."

Their challenge, she said, is that they over-qualify for low-income housing, but do not make enough money for other available housing. Their range, she said, is \$300 to \$650 per month.

John Joines, director of the Economic Security Corporation of the Southwest Area, described available rental housing as "still very, very tight market out there."

He said many homeowners who lost homes didn't have enough insurance money to rebuild, so they became renters, which saturated the market. More apartment complexes are coming online nearly every week, but many have increased monthly rates in comparison to before the tornado, making them unaffordable to some renters.

He predicted the city will see more available housing in about six to 12 months as some of the tax credit projects are completed. He believes they will be affordable to those still struggling to find housing, because public assistance is built into their rates.

"Then, we may have an easier market where people can find units. Right now it's still tough," he said.

Deadlines flexible

Those who remain in the temporary housing units have slightly less than six months left, although Sturner said the time frame is not a rigid one.

"When it gets close to 18 months, we're going to look at how many households are moving out and how close are they to moving," she said.

Carolyn Lehar, 71, who couldn't wait to get back to a normal lifestyle, spent 10 months living in a FEMA trailer. Today, she is home. Neighbors who walk past Lehar's front porch at No. 63 Redwood Gardens Apartments on Rex Street might think she has lived there awhile. She and her dog, Toi, greet visitors from wicker chairs amidst potted plants and outdoor decor.

But the neighbors know better, because most all of them are fellow tornado survivors who lived there before the apartments were flattened.

Lehar's move back to the apartments on April 16 was circuitous. She had first moved there in 2006 after the loss of her husband, Kenneth Kruse, and loved the communal atmosphere of living with other seniors. She remarried a few years later. She and Bud Lehar lived in Neosho until his death in March

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http://www.joplinglobe.com/local/x1968180907/Almost-half-of-tornado-affected-residents... 8/19/2012

 \square

2011. Lehar sold their farm in an auction on May 14 last year, and was moving a load of belongings into her new apartment at 20th Street and Connecticut Avenue just after 5 p.m. on May 22 when the tornado leveled it. It was to have been her first night there.

She and Toi made their way back to Redwood Gardens Apartments on April 16.

"It looks just like it did before," Lehar said of the newly rebuilt apartment complex. "Except for the storm shelter in the middle."

The residents still gather to play dominoes and checkers in the community room, and they still greet each other while walking dogs or sitting on their front porches.

"That's something I didn't get out in the FEMA place," she said. "I felt very depressed, very isolated. You're just stuck there; you're just camping."

While not having her lifetime of possessions takes some getting used to, and she admitted to feeling overwhelmed at making yet another move, she feels like she is where she belongs.

"Most everyone who was here before has returned. We're all family now. It's good to be back home."



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