Exhibit No.: Issue(s): Customer Communication Witness: Trina J. Muniz Type of Exhibit: Rebuttal Testimony Sponsoring Party: Union Electric Company File No.: ER-2014-0258 Date Testimony Prepared: January 16, 2015

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2014-0258

REBUTTAL TESTIMONY

OF

TRINA J. MUNIZ

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

St. Louis, Missouri January 2015

1		REBUTTAL TESTIMONY
2		OF
3		TRINA J. MUNIZ
4		FILE NO. ER-2014-0258
5	Q.	Please state your name and business address.
6	А.	My name is Trina J. Muniz. My business address is One Ameren Plaza,
7	1901 Choute	au Avenue, St. Louis, Missouri 63103.
8	Q.	By whom and in what capacity are you employed?
9	А.	I am employed by Union Electric Company, d/b/a Ameren Missouri
10	("Ameren M	issouri" or "Company") as Manager, Marketing and Advertising.
11	Q.	Please describe your employment history with Ameren Missouri.
12	А.	I joined Ameren Corporation in 2001 as the Senior Supervisor of
13	Advertising.	At that time, I was responsible for all paid media messages in Missouri and
14	Illinois. In 2	010, I transferred to Ameren Missouri and became Managing Supervisor of
15	Marketing an	d Advertising. In 2014, I became the Manager, Marketing and Advertising.
16	Q.	Please describe your duties and responsibilities as Manager,
17	Marketing a	nd Advertising.
18	А.	I manage the customer communications including paid, earned and owned
19	media.	
20	Q.	Please describe your qualifications.
21	А.	I have 29 years of communications experience in advertising, marketing
22	and public re	elations. Prior to joining Ameren, I spent 15 years at Bank of America in
23	their Marketi	ng, Advertising and Public Relations department. When I left in 2001, I was

1 the Vice President, Marketing Relationship Manager for Midwest South Consumer 2 Marketing. I have a Bachelor of Science degree in Business Administration with an 3 emphasis in Marketing from Southern Illinois University in Edwardsville and a Masters 4 of Business Administration degree from Webster University.

5

O. What is the purpose of your rebuttal testimony?

6 A. The purpose of my rebuttal testimony is to discuss the need to educate our 7 customers on our business and to provide them with information to assist them in 8 managing their accounts effectively. I will also discuss the cost associated with these 9 efforts and respond to the portion of the Staff Report Revenue Requirement of Service 10 ("Staff Report") sponsored by Jason Kuntz on the Company's communications expenses.

11

Q. You just used the phrase "communications expenses" yet that isn't 12 the term used in the Staff Report. Is the difference in language intentional?

13 A. Yes, it is. It is important when reviewing the communications expenses 14 that one understands the changes that have occurred in the past several years in how we 15 communicate with and reach our customers. The Commission Staff puts all of these expenditures into a grouping they call "advertising," which is also the language 16 17 historically used at the Commission for these costs. I believe this term to be incorrect 18 when applied to many of the costs identified by Mr. Kuntz.

19

Q. Please explain what you mean.

The traditional definition of "advertising" is the activity or profession of 20 A. 21 producing information for promoting the sale of commercial products or services. This is 22 not what we are doing when Ameren Missouri purchases advertising or when it participates in social media. We use these expenditures as a channel that allows us to 23

communicate efficiently and effectively to our 1.2 million customers. We educate our customers about safety. We educate our customers on how we produce and distribute electricity. We educate our customers on the cost of providing them cleaner, more dependable electricity. We educate them on our services that can help them manage their electric account. What we do not do is *promote* electricity sales. We are not "advertising" to gain business. We are communicating.

Q. Is that really true? For example, there is an Ameren sign at Busch
stadium and it does nothing to educate customers.

9 A. Ameren Missouri does have expenditures which are goodwill expenditures 10 because it is a part of the corporate community of St. Louis. The cost of the Ameren 11 sign, and other goodwill expenditures are not, however, included in Ameren Missouri's 12 revenue requirement in this case. I am addressing a different set of communications 13 costs.

Q. Stepping back for a moment, please explain how the Staff determined what expenditures should be included in the revenue requirement for this case.

A. The principle Staff applies when evaluating advertising expenditures dates back to the 1985 rate proceedings Commission decision in *Re: Kansas City Power and Light Company*, Case Nos. EO-85-185 et al. (KCPL Order). That case was decided approximately 30 years ago. Much has changed in the way customers receive information over the last 30 years. In 1985, Mark Zuckerberg was five years old. There was no online banking. There was no such thing as a smart phone. There were no tweets. It was a very different world than we find ourselves in today. And as the

- 1 technological options for our customers evolve, it is incumbent upon Ameren Missouri to
- 2 keep up with those changes. Our customers expect it, even demand it.

3	Q.	What are the categories from the KCPL Order that Staff uses in its
4	review of the	ese expenditures?
5	А.	Staff uses five categories from the KCPL Order, as follows: general,
6	institutional,	safety, political and promotion. The categories are defined as follows:
7 8		1. General: informational advertising that is used in the provision of adequate service;
9 10		2. Safety: advertising which conveys the ways to safely use electricity and to avoid accidents;
11 12		3. Promotional: advertising used to encourage or promote the use of electricity;
13		4. Institutional: advertising used to improve the company's image; and
14		5. Political: advertising associated with political issues.
15	Q.	How does the Staff use these categories to determine their
16	recommenda	tion on whether a cost should be considered recoverable?
17	А.	The KCPL Order states that Institutional and Political advertising costs are
18	not recoveral	ble. It states that General and Safety advertising costs are recoverable.
19	Finally, the k	CPL Order says that Promotional advertisements must be reviewed and, to
20	the extent th	e utility can provide cost-justification for the advertisements, then that
21	portion can b	e allowed.
22	Q.	Has the Commission issued any other guidance for evaluating these
23	expenditures	s since the KCPL Order?
24	А.	Yes. In its Report and Order in Ameren Missouri's 2008-2009 rate case
25	(File No. El	R-2008-0318), the Commission stated that the standards for advertising

established in the KCPL Order should be applied to campaigns and not on an ad-by-ad
basis. In short, if the campaign as a whole is unacceptable under the Commission's
standards, then the cost of all advertisements within the campaign should be allowed.
Staff, however, ignores the Commission's decision in that case and has reviewed the ads
on an ad-by-ad basis.

6

Q. Do you disagree with the guidance provided in these two orders?

7 My concern isn't with what the KCPL Order (or the later Ameren A. 8 Missouri order) says; rather it is how those standards are applied by the Staff. They 9 utilize no objective standard or methodology to place the advertising in one of the five 10 categories or another. Without a standard, Staff subjectively determines what category 11 each expenditure is placed within. My belief that Staff made this determination 12 subjectively is bolstered by the fact that the Staff Report does not provide any 13 explanation of what guidelines or methodology was followed by Mr. Kunst to classify an 14 expenditure, for example, as Institutional rather than General. There is not a single word of how the categories were applied – only an assertion that they were. Without a clear 15 16 justification or explanation of how Staff categorized these expenditures, there is no 17 opportunity for Ameren Missouri to fully respond.

18

Q. Is your concern limited to this case?

A. It is not. In the past, the Company was only provided an explanation in surrebuttal testimony or in response to deposition questions designed to explore Staff's reasoning. Even then, that reasoning often consisted of nothing more than Staff's impression of the item. This likely stems from the fact that Staff's review is often completed by an auditor. I am not saying that the Staff's reviewer is not qualified to audit

1 the Company's financial records, but in this and other cases there is no evidence that the 2 auditor has any experience in advertising or communications. My staff and the 3 individuals hired to assist us with these communications are trained, highly skilled 4 communication professionals. There is a reason and a strategy behind the 5 communications made. Without an understanding of communications, it is difficult to 6 see how the Staff can accurately categorize our communication expenditures under the 7 KCPL Order, or otherwise.

8

Q. What kind of knowledge does Staff need in order to better understand 9 Ameren Missouri's communication strategy?

10 A. To be fair in its recommendations to allow or not allow various costs, it 11 would be beneficial for the Staff to understand what it takes to get the message to our 12 customers and penetrate the massive amounts of information that our customers receive, 13 in many forms, in their everyday lives. When determining how to get educational 14 messages to our customers, we first look at how the message needs to be sent and at what 15 frequency. We consider these three areas of communications:

16 **Paid media**: defined as communication that is purchased such as advertising in 17 newspapers, television, radio, out-of-home, etc. The message is controlled by the 18 company and appears exactly as it was submitted.

19 **Earned media**: defined as communication that is generated by recognition of 20 content which is shared through news media, word of mouth, social media, etc. The 21 message is not controlled and allows interpretation or bias by the outlet.

22 **Owned media**: defined as communication that a company owns and controls like 23 their company website, company social media sites, employee communications, etc.

1 To effectively reach our customers, Ameren Missouri must use a mix of paid, 2 earned and owned media. The Company's 1.2 million electric customers use, retain and 3 react to information differently so we must understand their behavior and lifestyles when 4 determining what channels are available to reach them. Since the KCPL Order was 5 issued in 1985, many new channels of communication have been introduced. Technology has played a tremendous role in creating demand for an integrated 6 7 communication plan. At one time, companies such as Ameren Missouri could use paid 8 media on three television networks and reach up to 90 percent of their customer base in 9 an average week. Today, the percent of customers who get their information solely from 10 television has declined to well below 50 percent and continues to decline. Television 11 remains the strongest channel to get our customers' attention but we must use other 12 channels that allow more content to be delivered. In December of 2014, Neilsen issued a 13 Total Audience Report showing the changing journey for information. This specific 14 information can be found on page four of Schedule TJM-R1 attached to my testimony. In 15 order to reach our customers, Ameren Missouri must now use channels such as internet, 16 social platforms and streaming content stations, to name a few.

Our customers on average are exposed to over 20,000 messages a day. A customer must hear or view a message between six and eight times before a customer can actually recall seeing the message and can retain the information they received in that message. That number was just three times in 1985. We must communicate more often than we did in the past to get our messages across to customers.

Where and when customers receive a message is important to understand as well.
We must get their attention, have them determine a need for the information and create a

1 desire for them to take action. The use of smart phones and tablets has amplified the 2 need to communicate instantaneously. Customers expect to be able to access information 3 where ever they are, at the touch of a screen. Some studies have stated that most media 4 consumption is conducted while multi-tasking. For instance, people using a computer 5 while watching television is becoming the norm. Attention spans are becoming very 6 short, less than five seconds, occurring at a time while viewers are switching between 7 different media. Customers are making decisions at different times and places than ever 8 before. Making sure our customers have the information they need when they need it is 9 critical to us providing them the service they expect and deserve.

10 Customers are also deciding when and where they will allow messaging. It is 11 estimated that 80% of Americans now own a personal computer and access the internet 12 through high speed connectivity. Adding smart phones and devices (which indeed are 13 handheld computers) to the mix and the number increases to 90%. In 1985, Caller ID and 14 subscription-based radio was not available. Customers now register on Do Not Call and 15 Do Not Mail lists.

All of these developments allow our customers to take control of when and where a message reaches them and changes the landscape of how it occurs. This has meant that we have had to adapt our communications in order to reach them. The developments likely were not foreseen in 1985.

20

Q. How do you determine what form of communication should be used?

A. We use a variety of channels to obtain information from our customers.
We have communication options that allow our customer to initiate the contact. We use

these options to obtain and provide information to and from our customers. Some of
 those channels include:

3	1.	By telephone. Customers can call our customer service center to get
4		information or ask questions about their account. This is one of the most
5		costly ways for us to communicate with our customers and less than 20% of
6		our customers reach out to us in this manner each year. The information we
7		send out through various communication channels educate our customers on
8		information they need and reduce the need for them to call the contact center,
9		which reduces the level of call center costs that would otherwise be necessary.
10	2.	On the internet. We have a presence on Facebook, Twitter and You Tube
11		which allows us to provide information to our customers or answer
12		questions/comments that our customers post. By answering these questions in
13		a public forum, other customers, who may have the same need for
14		information, will see our response. We also offer the option of contacting us
15		through our website or via email. Again, this lowers costs in other areas,
		principally the labor that would be needed to field more calls.

- In person at events. We sponsor and attend many public events where our
 employees will answer questions and give information to our customers. By
 wearing attire provided by the company, our employees are easy to find and
 easily approached.
- 4. By mail. Customers can send us correspondence. This is a lengthy processand does not allow for immediate response.

- Customer research. We conduct focus groups, online customer panels and
 subscribe to various secondary research studies. This gives us a mix of
 quantitative and qualitative research.
- 4 In turn, we use the feedback we receive from our customers and determine what5 messages need to be communicated.
- 6

Q. Why the emphasis on providing education to your customers?

7 Providing educational information to our customers creates higher levels A. 8 of customer satisfaction. High levels of customer satisfaction provide after-the-fact, 9 market-based validation that our Company is operating effectively and efficiently. Many 10 utilities have started measuring customer satisfaction to determine if the programs and 11 services they offer meet with their expectations. We measure customer satisfaction with 12 a benchmark study, the J. D. Power Electric Utility Residential Customer Satisfaction 13 Study, which allows us to better determine our need to communicate and to gauge our 14 customers' satisfaction on how we conduct our business and serve them. We know 15 through communication, we can provide our customers the transparency and information 16 they need to make educated decisions. This information allows us to take steps to 17 improve in areas where customers are less satisfied, which can lead to decreased 18 complaints to both the Company and the Commission, saving staff time for both.

19

Staff's recommendations

20

21

Q. Do you agree with the classifications that Staff has recommended for each campaign or expenditure?

A. No, I do not. We differ on several.

1 **Q**. Are there specific campaigns or expenditures that the Staff has 2 recommended disallowing that you believe should have different classification and 3 be included in the Company's cost of services? 4 A. Yes, there are several. I will go through them by campaign or by ad where 5 appropriate. 6 Community Lights: Staff recommended a total of \$283,485 should be 7 disallowed. This campaign was used to recognize customers in our service 8 territory that give back to their communities through volunteerism. What Staff 9 likely didn't realize is the purpose of the campaign. The campaign was held on 10 Facebook with the purpose of driving traffic to the Ameren Missouri page to 11 increase the awareness of Ameren Missouri's presence on Facebook and to 12 increase the number of "likes" we have on that page. When a customer "likes" 13 our page, they will then receive our communications in their newsfeed. 14 Consequently we are increasing the number of people who will see our ongoing 15 communications and outage information during large outages. Keep in mind, not 16 only do the people who "like" our page get the message but the "friends" of those 17 who "like" us can see the message as well. This greatly amplifies our messaging. 18 As a result of this campaign, our Facebook followers increased by 5.4%, giving us 19 the opportunity to continue to educate them on our business and to get important 20 information to them (like outage information). This growth during this campaign 21 was twice as much as any other time period this year.

22 Staff categorized Community Lights as Institutional and recommended 23 disallowance of the full \$283,485. Given the purpose of the campaign, however,

these expenditures fit the Commission's General category and are therefore
 recoverable.

3 Social Media Campaign: Staff recommends allowance of only 50% of 4 this campaign based on what appears to be a post-by-post (like an ad-by-ad) review within the campaign, contrary to the approach sanctioned by the 5 6 Commission in File No. ER-2008-0318. The recommended disallowance totals 7 \$183,390. Here, Ameren Missouri is disadvantaged by the lack of explanation provided in the Staff Report. Without this explanation, I was required to review 8 9 the documents provided through data requests and I believe Staff based their 10 recommendation by viewing the content in our monthly Facebook calendars. 11 Again, these calendars only represent the planned communications on Facebook 12 and don't tell the entirety of what occurs on Facebook and how it is used to 13 communicate with customers. As part of our Facebook activity, we respond to 14 customer posts on our page, especially questions that might be asked. We review 15 posts and provide engagement every single day to keep us close to our customer 16 base so we are available to help our customers get the answers they need to make 17 informed decisions. Social media only works when there is a constant stream of 18 messages which keep our base of followers engaged. There are a variety of 19 messages that we post proactively including safety, outage, customer service, 20 community involvement and much, much more. In order to accomplish that, 21 some posts are designed to get attention more than to provide information, but 22 that is necessary to keep our name in front of our Facebook followers. A single 23 Facebook post may not appear to be educational when viewed on its own, but the

stream of Facebook posts—which should be considered one campaign--is
 educational because the constant stream of posts keeps the followers interested so
 that they receive the particular posts that are designed to be educational or
 informational

5 Staff categorized Social Media as Institutional and recommended 6 disallowance of half of the cost. This category is also more accurately 7 categorized as General and because the campaign is Institutional and recoverable, 8 100% of the costs (\$366,780) should be recoverable.

9 **Energy Efficiency:** Staff recommends disallowance of 50% of this 10 campaign, which also does not abide by the Commission's campaign guidance from File No. ER-2008-0318. Staff's recommendation was to disallow \$16,644. 11 12 Again, the Staff Report does not contain a word of explanation about this 13 recommendation and, without an explanation; we cannot know why the 14 recommendation was made. Ameren Missouri does not consider these 15 expenditures to be a part of its Missouri Energy Efficiency Investment Act 16 ("MEEIA") program costs, but rather was general messaging designed to raise 17 awareness that Ameren Missouri was introducing energy efficiency programs. 18 This communication was design to get the word out so that our customers know 19 that ActOnEnergy.com was where customers can find out about rebate options 20 and to get conservation information to assist customers in lowering their use. 21 Once the programs were approved, any communication designed to promote the 22 Company's MEEIA programs were captured as MEEIA expenses and the costs

are recovered through the Company's Energy Efficiency Investment Charge. The
 Company does not seek to recover those costs in this case.

3 Staff categorized these Energy Efficiency expenditures as Institutional and 4 recommended disallowance of half, but since the campaign is General the entire 5 expenditure should have been allowed, consistent with the Commission's 6 guidance found in File No. ER-2008-0318. There was no explanation of why any 7 of these costs shouldn't be allowed. Clearly energy efficiency is something to be 8 promoted under Missouri law and so the costs of doing cannot be considered 9 imprudent. The Company should be allowed to recover 100% of the cost of this 10 campaign, which is \$33,288.

11 Storm Response Ads: Staff recommends a disallowance of \$49,901. 12 These ads were run in newspapers after tornados left 95,000 customers without 13 power. When our customers experience interruption in service, they want to 14 know what caused their outage, what we did to restore power quickly and whether 15 there is anything else the customer needs to do. The ads are attached to the Staff 16 Report and contain a great amount of detail about the work necessary to restore 17 power after this storm. It is titled "What it takes to restore power to 95,000 18 customers" and can be found on page four of Appendix 4 to the Staff Report. The 19 Staff Report contains no explanation of why this cost should not be recoverable.

20 Staff categorized the Storm Response Ads as Institutional and 21 recommended disallowance of the cost. However, because these communications 22 were informational advertising that is used in the provision of adequate service,

they should be classified as General and we should be allowed to recover the cost
 of \$49,901.

3 Cardinal Digital Outdoor signs: Staff recommended a disallowance of 4 \$44,222 of these signs, presumably because they are tied to the Cardinals, 5 although the Staff Report provides no basis for their recommendation. These costs are prudent. In order to raise awareness for our energy effective rebates and 6 7 to provide tips on how to lower energy usage, we partnered with the St. Louis 8 Cardinals. The agreement put the Cardinals' live game scores on digital outdoor 9 boards on highways throughout St. Louis with ActOnEnergy.com prominently 10 displayed on the signs, drawing attention to our website. The Cardinals are popular in our service territory; this partnership attracted many of our customers 11 12 and put our website in front of them, giving us the opportunity to drive this traffic 13 to energy saving messages.

14 Staff categorized the Cardinal digital signs as Institutional and 15 recommended disallowance of the entire cost. However, these costs enabled us to 16 provide information about our service – energy efficiency, and therefore should 17 be classified as General. We should therefore be allowed to recover the entire 18 cost, which is \$44,222.

19 **Reliability Fair Invite:** Staff recommended disallowance of 50% of the 20 printing costs of this invite, which is \$66,610. Once again, the Staff Report 21 contains no explanation, so it is impossible to understand the basis for their 22 recommendation. This expenditure is part of our overall Reliability campaign and 23 should have been allowed, per the Commission's decision in File No. ER-2008-

1 0318. One could speculate that the reason for the proposed disallowance was that 2 the Company hired a popular professional football player to appear at the fair. 3 The purpose of having the football player at the fair was to attract attention and 4 bring more people to the fair, which was open to the public and held in Florissant. 5 Without his presence, the fair would have been far less well attended and thus less 6 effective. The reliability fair provided customers the opportunity to learn about 7 Ameren Missouri's efforts to improved system reliability (thus decreasing the 8 number and length of outages that customers may experience) and to answer any 9 questions our customers had.

10 Staff categorized the reliability fair invite as Institutional, but instead like 11 the Reliability campaign as a whole it was General and that the Company should 12 be allowed to recover 100% of the \$66,610.

13 Louie the Lightning Bug Parade Balloon: Staff recommended a 14 Without explanation, I do not know why the disallowance of \$52,664. 15 recommendation to disallow these costs was made. Louie the Lightning Bug is 16 the safety ambassador for Ameren Missouri and has been for many years. It is a 17 syndicated character that promotes an awareness of the need for safety around 18 power lines. The balloon is used in large, sometimes televised, parades and is 19 held by Ameren Missouri employees and volunteers. The Louie the Lightning 20 Bug bus accompanies Louie at all parades and displays Louie's safety message 21 "Don't Hang Around When Lines are Down." By entering Louie into parades, 22 we are promoting the message to be safe around electricity to children.

1 Staff categorized the Louie Parade Balloon as Institutional and 2 recommended disallowance, but its purpose is clearly for the safety of our 3 customers, particularly children and it is appropriately classified as Safety under 4 the KCPL Order. The entire \$52,664 should be included in the revenue 5 requirement.

Solar Farm artwork: Staff recommended disallowance of the entire cost 6 7 of \$197,000. This item is an artist's rendering of the new O'Fallon Renewable 8 Energy Center. It was used to help our customers learn about the new renewable 9 energy center's generation that was being added to the grid by Ameren Missouri. 10 Many of our customers have expressed a desire to have cleaner energy added to 11 the generation portfolio and voted for a law that mandates this type of 12 expenditure. Material like this artwork is needed for us to educate our customers. 13 The rendering was used multiple times, including on the Company's website, 14 which is available to all customers.

15 Staff categorized the artwork as Institutional, but this artwork should be 16 categorized as General and the entire \$197,000 should be included in the 17 Company's revenue requirement

Downtown Pole Banners: Staff recommended a disallowance of \$1,621 for these banners. The banners are displayed around the Ameren Missouri headquarters for the purpose of employee education. The banners help raise the awareness of the service we provide our customers. As a utility, our employees are approached at their homes and communities by our customers and asked questions about the service and programs that Ameren Missouri offers. It is

- important for us to keep our employees engaged and aware of information used to
 serve our customers.
- 3 Staff categorized the cost of downtown pole banners as Institutional. I
 4 believe it should be classified as General and that the \$1,621 should be included
 5 in the Company's revenue requirement.
- 6Q.What is the dollar adjustment you would recommend the7Commission make to Staff's recommendations?
- 8 A. In total, the difference between what the Staff is proposing and
 9 what should be allowed is \$698,734.
- 10 Q. Does this conclude your rebuttal testimony?
- 11 A. Yes, it does.

THE TOTAL AUDIENCE REPORT

DECEMBER 2014



THE TOTAL AUDIENCE SERIES | Q3 2014

Schedule TJM-R1



WELCOME

DOUNIA TURRILL SVP INSIGHTS, NIELSEN

TIME FOR "TOTAL AUDIENCE"

The question of audience delivery is one that weighs heavily on the minds of media industry executives who on a daily basis evaluate the challenges of content distribution, ad delivery and audience measurement. At Nielsen, we are faced with these same challenges and have been asking the same question for a long time. Now is the time to progress the conversation.

Last month Nielsen did just that with the announcement of our total audience measurement proposal. Now is the time for a fundamental industry change. Our goal is to deliver comprehensive measurement of all audience and all advertising by following the consumer. Our TOTAL AUDIENCE REPORT (previously the Cross Platform Report) continues to be part of our ongoing efforts to provide more insights into the consumer's media consumption and experience as they navigate through their content.

The reality of a finite 24 hour day means we will not always see growth in time spent watching video. While we are not seeing a departure from media content consumption, we do see a shift in consumer behavior and today we see a resounding growth in consumption on digital platforms.

NEVER BEFORE HAS THE VIEWER HAD MORE CONTROL AND MORE SKILL AT NAVIGATING THIS EVOLVING ECOSYSTEM OF DEVICES AND PLATFORMS FOR CONTENT DISCOVERY. Declines in traditional TV viewing have us all searching for the audience, trying to explain the shift away from viewing and away from content. Increased opportunities for content discovery on digital platforms, through over the top services, or through media companies' providing their content online, accessible across an array of devices, all provide a vast media playground for the consumer who is now in control of what they watch and when they watch it.

The growing penetration of new devices and the popularity of subscriptionbased streaming services, time-shifted and over-the-top viewing — as well as cord-cutting and cord shaving — are fundamentally changing the TV industry.

I would add that consumer demand is not changing the appetite for quality, professionally produced content. Hits drive viewership and consumers live comfortably in this new media world. Sure, who hasn't been frustrated when trying to find that one episode of one show, or frustrated when a perfectly good session with a favorite program is cut short when the connection gets lost? And yet, when that happens, the opportunity to turn to another source or gadget for that viewing pleasure can be seamless and dare I say...fairly easy.

In reality, media companies, digital players and measurement are at a crossroad. Content remains king and consumers are steering their own content discovery experience. Length and access are not top of mind for the viewer looking for that quality content; they look for what they want, when they want. Distribution and discovery need to move hand in hand and be met with that total audience measurement of both programs and commercials.

When it comes to reflecting this in the ratings, our goal is to create a total measurement of all content and all ads — regardless of how they are accessed and the ad model that they're supporting. Nielsen's vision is to create an environment where all video content can be consistently measured with ratings for both the content and the advertising.

This report continues to provide context to these conversations and ongoing insights into an evolving media industry.

DOUNIA



HOW THE VIEWING LANDSCAPE IS EVOLVING

A CONSUMER'S JOURNEY TO CONTENT DISCOVERY





MORE CHOICES BEING DRIVEN BY TECHNOLOGY



n

JOURNEY TO TOTAL AUDIENCE MEASUREMENT



DIGITAL CONTINUES STRONG GROWTH





INCREASED CHOICE OF ONLINE STREAMING AND MOBILE VIDEO APPS





A MULTICULTURAL AMERICA WITH DIFFERING HABITS





ADVANCING THE CONVERSATION

SVOD, DRIVING HITS OR CREATING MISSES?



Source: Nielsen custom & proprietary study

A CLOSER LOOK AT THE DATA

EXHIBIT 1 - AVERAGE TIME SPENT PER ADULT 18+ PER DAY





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TABLE 1 - A WEEK IN THE LIFE; BASED OFF THE TOTAL US POPULATION

WEEKLY TIME SPENT IN HOURS : MINUTES - BY AGE DEMOGRAPHIC

	K 2-11	T 12-17	A 18-24	A 25-34	A 35-49	A 50-64	A 65+	Р 2+	A 18+	BLACK 2+	HISP. 2+	ASIAN AM. 2+
On Traditional TV	22:41	19:12	17:34	23:09	29:41	39:23	47:13	30:17	32:45	43:54	25:50	16:24
Watching Time-Shifted TV	2:33	1:54	1:43	3:03	3:40	3:49	3:19	3:04	3:17	2:55	2:11	1:47
Using a DVD/ Blu-Ray Device	1:53	1:08	0:46	1:20	1:08	1:02	0:37	1:08	1:00	1:14	1:08	0:50
Using a Game Console	3:00	4:19	3:35	2:36	1:03	0:20	0:07	1:46	1:17	1:57	1:59	1:07
Using a Multimedia Device	0:35	0:22	0:38	0:44	0:30	0:17	0:13	0:28	0:27	0:18	0:18	1:09
Using the Internet on a Computer	0:19	0:46	4:54	5:59	7:22	5:39	2:48	4:26	5:31	4:27	3:08	3:52
Watching Video on Internet	0:18	0:26	1:46	1:56	1:48	1:10	0:26	1:10	1:24	1:21	0:59	1:06
Using any App/ Web on a Smartphone	n/a	n/a	9:40	10:32	9:39	6:22	1:16	n/a	7:27	10:47	10:06	9:09
Watching Video on a Smartphone	n/a	n/a	0:29	0:19	0:14	0:07		n/a	0:12	0:24	0:21	0:20
Listening to AM/FM Radio	n/a	7:23	10:30	11:35	13:48	14:57	12:06	12:26	12:58	12:52	12:32	n/a

TABLE 2 - OVERALL USAGE BY MEDIUM

NUMBER OF USERS 2+ (IN 000'S) - MONTHLY REACH

	COMPOSITE		BLACK		HISPANIC		ASIAN AMERICAN	
	Q3 14	Q3 13	Q3 14	Q3 13	Q3 14	Q3 13	Q3 14	Q3 13
On Traditional TV	282,665	283,682	37,553	36,729	48,211	47,619	15,056	15,606
Watching Time-shifted TV	173,305	167,142	22,281	19,726	25,183	23,591	8,112	8,285
Using a DVD/Blu-Ray Device	139,273	141,648	16,109	16,897	22,581	23,134	7,044	7,054
Using a Game Console	95,315	94,939	11,802	11,741	17,871	18,138	5,702	5,320
Using a Multimedia Device	26,872	n/a	2,050	n/a	3,222	n/a	3,501	n/a
Using the Internet on a Computer	194,527	200,013	23,572	23,980	26,000	26,655	6,922	7,210
Watching Video on Internet	144,141	147,678	17,524	17,708	18,693	19,554	5,476	5,669
Using any App/Web on a Smartphone	162,798	139,136	20,811	17,904	29,581	25,480	9,494	8,270
Watching Video on a Smartphone	125,686	100,588	17,325	14,471	24,620	20,394	7,416	6,177
Listening to AM/FM Radio	258,734	257,420	32,981	32,715	42,490	41,931	n/a	n/a

TABLE 3 - MONTHLY TIME SPENT BY MEDIUM

USERS 2+ IN HOURS: MINUTES

	СОМР	OSITE	BLA	ACK	HISPANIC		ASIAN AMERICAN	
	Q3 14	Q3 13	Q3 14	Q3 13	Q3 14	Q3 13	Q3 14	Q3 13
On Traditional TV	141:19	147:01	201:43	207:04	117:48	123:08	82:18	87:10
Watching Time-shifted TV	14:20	13:12	13:25	10:16	9:56	9:15	8:57	9:04
Using a DVD/Blu-Ray Device	5:16	5:24	5:39	6:46	5:08	5:24	4:10	4:23
Using a Game Console	8:14	7:07	8:57	8:41	9:05	7:52	5:38	4:55
Using a Multimedia Device	2:09	n/a	1:22	n/a	1:20	n/a	5:47	n/a
Using the Internet on a Computer	30:06	27:02	32:27	29:16	26:25	21:56	42:13	33:28
Watching Video on Internet	10:42	6:41	13:18	9:13	11:31	8:21	15:04	12:29
Using any App/Web on a Smartphone	47:35	35:44	55:43	46:15	52:14	40:15	47:15	33:15
Watching Video on a Smartphone	1:46	1:25	2:32	2:13	2:16	2:03	2:17	1:45
Listening to AM/FM Radio	58:53	60:42	61:03	62:51	58:10	60:07	n/a	n/a



TABLE 4 - MONTHLY TIME SPENT BY MEDIUM IN HOURS: MINUTES AMONG COMPOSITE

	K 2-11	T 12-17	A 18-24	A 25-34	A 35-49	A 50-64	A 65+	P 2+
On Traditional TV	106:27	89:13	91:32	112:33	136:32	177:14	211:31	141:19
Watching Time-shifted TV	11:56	8:51	8:56	14:52	16:50	17:12	14:53	14:20
Using a DVD/Blu-Ray Device	8:52	5:17	4:01	6:29	5:13	4:39	2:44	5:16
Using a Game Console	14:05	20:05	18:41	12:38	4:49	1:28	0:32	8:14
Using a Multimedia Device	2:44	1:43	3:17	3:34	2:17	1:17	1:00	2:09
Using the Internet on a Computer	4:19	7:27	32:58	34:34	38:33	33:20	22:18	30:06
Watching Video on Internet	6:22	6:17	16:05	14:59	12:14	9:00	4:34	10:42
Using any App/Web on a Smartphone	n/a	n/a	52:09	55:27	51:52	39:08	26:12	47:35
Watching Video on a Smartphone	n/a	n/a	3:06	2:02	1:36	1:03	0:24	1:46
Listening to AM/FM Radio	n/a	35:56	50:31	53:59	63:22	69:08	61:21	58:53

TABLE 4A - MONTHLY TIME SPENT BY MEDIUM IN HOURS: MINUTES

AMONG BLACKS

	K 2-11	T 12-17	A 18-24	A 25-34	A 35-49	A 50-64	A 65+	P 2+
On Traditional TV	151:36	154:51	139:08	167:11	206:16	266:35	308:00	201:43
Watching Time-shifted TV	11:54	9:59	10:28	15:03	17:08	14:13	11:11	13:25
Using a DVD/Blu-Ray Device	6:56	3:59	3:24	7:31	5:12	7:32	2:43	5:39
Using a Game Console	12:27	21:53	15:28	11:35	5:34	1:31	0:53	8:57
Using a Multimedia Device	1:13	1:15	1:41	2:12	1:58	0:40	0:16	1:22
Using the Internet on a Computer	5:36	7:39	40:05	38:19	39:56	33:17	20:37	32:27
Watching Video on Internet	7:03	6:01	19:36	20:16	14:07	9:41	4:38	13:18
Using any App/Web on a Smartphone	n/a	n/a	57:16	69:28	61:11	46:56		55:43
Watching Video on a Smartphone	n/a	n/a	4:19	3:04	2:11	1:44		2:32
Listening to AM/FM Radio	n/a	39:50	50:01	55:12	65:36	74:46	68:29	61:03

TABLE 4B - MONTHLY TIME SPENT BY MEDIUM IN HOURS: MINUTES

AMONG HISPANICS

	K 2-11	T 12-17	A 18-24	A 25-34	A 35-49	A 50-64	A 65+	P 2+
On Traditional TV	108:42	84:35	83:46	100:32	116:32	154:22	230:26	117:48
Watching Time-shifted TV	9:57	7:15	7:39	9:34	10:39	11:21	13:58	9:56
Using a DVD/Blu-Ray Device	8:13	5:46	3:47	5:04	4:31	3:30	3:10	5:08
Using a Game Console	11:48	20:14	16:57	9:47	3:35	1:20	0:51	9:05
Using a Multimedia Device	1:40	1:05	1:42	1:57	1:14	0:25	0:44	1:20
Using the Internet on a Computer	4:07	7:51	31:54	30:44	33:36	31:59	18:47	26:25
Watching Video on Internet	6:43	6:48	16:43	14:57	10:34	11:16	4:23	11:31
Using any App/Web on a Smartphone	n/a	n/a	53:28	58:00	55:07	39:04	-	52:14
Watching Video on a Smartphone	n/a	n/a	3:36	2:20	1:48	0:54	-	2:16
Listening to AM/FM Radio	n/a	36:53	51:23	57:22	65:53	68:12	63:56	58:10

TABLE 4C - MONTHLY TIME SPENT BY MEDIUM IN HOURS: MINUTES

AMONG ASIAN AMERICANS

	K 2-11	T 12-17	A 18-24	A 25-34	A 35-49	A 50-64	A 65+	P 2+
On Traditional TV	57:53	57:42	52:28	72:56	71:26	99:02	159:32	82:18
Watching Time-shifted TV	7:39	7:47	6:26	9:25	10:04	9:28	9:13	8:57
Using a DVD/Blu-Ray Device	7:37	3:53	2:21	3:22	3:58	3:58	3:10	4:10
Using a Game Console	9:49	10:39	9:58	7:44	3:37	2:34	0:22	5:38
Using a Multimedia Device	5:04	3:48	5:24	7:07	5:31	4:43	8:48	5:47
Using the Internet on a Computer	6:14	11:14	56:58	42:42	60:37	27:30	19:25	42:13
Watching Video on Internet	6:00	8:41	27:29	17:19	16:22	7:16	4:56	15:04
Using any App/Web on a Smartphone	n/a	n/a	48:07	53:51	45:08	31:49	-	47:15
Watching Video on a Smartphone	n/a	n/a	3:05	2:06	2:16	1:13	-	2:17



TABLE 5A - CROSS-PLATFORM HOMES RANKED BY IN-HOME STREAMING BEHAVIOR

		сомро	SITE		BLACK					
STREAMING QUINTILE	# OF PERSONS (000)	STREAM (AVERAG	INTERNET	TV UTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET	TV JTES)		
Stream 1	24,552	23.8	62.2	251.0	2,496	26.2	65.1	395.9		
Stream 2	24,552	2.7	30.3	237.9	2,494	3.3	27.1	369.2		
Stream 3	24,543	0.7	17.9	243.0	2,497	0.9	15.8	356.7		
Stream 4	24,532	0.2	12.7	243.1	2,491	0.2	13.8	307.8		
Stream 5	24,558	0.0	7.2	245.5	2,497	0.0	5.7	317.5		
Non Streamers	123,240	0.0	1.0	223.1	14,705	0.0	0.7	308.1		
All	245,977	2.8	13.6	233.7	27,181	2.9	12.3	327.4		

		HISPA	NIC		ASIAN AMERICAN					
STREAMING QUINTILE	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MINI	TV JTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET	TV UTES)		
Stream 1	3,146	19.8	42.7	209.3	1,440	24.2	52.6	72.8		
Stream 2	3,137	2.8	19.0	183.2	1,441	3.3	25.4	111.4		
Stream 3	3,147	0.9	9.3	197.9	1,445	0.7	19.7	134.0		
Stream 4	3,141	0.2	7.5	195.7	1,427	0.2	23.8	158.6		
Stream 5	3,147	0.0	7-7	204.4	1,445	0.0	6.3	143.4		
Non Streamers	20,017	0.0	0.5	191.7	8,185	0.0	1.0	146.2		
All	35,733	2.1	7.9	194.6	15,383	2.7	12.5	135.7		

TABLE 5B - CROSS-PLATFORM HOMES RANKED BY IN-HOME INTERNET BEHAVIOR

		СОМРО	SITE		BLAC	K		
INTERNET QUINTILE	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MINI	TV UTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MINU	TV JTES)
Internet 1	33,645	13.8	73.9	289.9	3,428	16.1	72.2	411.8
Internet 2	33,659	3.6	16.7	247.6	3,448	4.0	16.6	364.5
Internet 3	33, 615	2.0	5.5	222.1	3,416	1.5	5.2	328.1
Internet 4	33, 651	0.5	1.5	224.3	3,423	0.6	1.4	297.4
Internet 5	33, 648	0.1	0.2	210.0	3,440	0.1	0.2	302.0
Non Internet Users	77,759	0.0	0.0	222.0	10,027	0.0	0.0	303.3
All	245,977	2.8	13.6	233.7	27,181	2.9	12.3	327.4

		HISPA	NIC	ASIAN AMERICAN				
INTERNET QUINTILE	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MINI	TV JTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET	TV JTES)
Internet 1	4,314	12.5	50.3	232.8	2,001	12.7	73.8	122.6
Internet 2	4,328	3.1	10.0	192.8	1,983	4.5	15.9	113.6
Internet 3	4,300	1.3	3.2	186.4	1,987	2.4	4.7	113.0
Internet 4	4,314	0.4	0.9	184.4	2,019	0.7	1.2	141.7
Internet 5	4,311	0.1	0.2	184.1	1,983	0.2	0.1	148.8
Non Internet Users	14,167	0.0	0.0	191.9	5,409	0.1	0.0	150.2
All	35,733	2.1	7.9	194.6	15,383	2.7	12.5	135.7



TABLE 5C - CROSS-PLATFORM HOMES RANKED BY IN-HOME TELEVISION VIEWING BEHAVIOR

		сомро	SITE			BLAC	K	
TELEVISION QUINTILE	# OF PERSONS (000)	STREAM (AVERAC	INTERNET	TV UTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MIN	TV UTES)
Television 1	48,284	3.5	21.4	613.1	5,346	4.4	19.1	799.6
Television 2	48,275	2.4	13.3	294.0	5,342	3.4	15.2	420.0
Television 3	48,281	2.0	11.8	174.3	5,332	2.3	10.8	252.9
Television 4	48,269	2.2	10.2	86.6	5,346	2.7	10.6	144.0
Television 5	48,291	3.4	10.6	18.1	5,335	1.7	6.4	37.0
Non Television Viewers	4,576	6.5	17.8	0.0	479	1.2	3-7	0.0
All	245,977	2.8	13.6	233.7	27,181	2.9	12.3	327.4

		HISPA	NIC	ASIAN AMERICAN				
TELEVISION QUINTILE	# OF PERSONS (000)	STREAM (AVERAG	INTERNET GE DAILY MINI	TV JTES)	# OF PERSONS (000)	STREAM (AVERAC	INTERNET GE DAILY MINI	TV JTES)
Television 1	7,070	2.2	11.1	471.2	2,996	1.3	9.2	421.3
Television 2	7,077	1.9	8.5	247.6	2,993	1.9	9.9	160.6
Television 3	7,064	2.1	7.2	157.1	2,988	1.8	12.4	83.3
Television 4	7,076	2.0	7.3	81.1	2,997	4.5	12.9	29.4
Television 5	7,071	2.2	5.2	19.8	2,996	3.7	16.4	4.3
Non Television Viewers	375	5.4	13.1	0.0	412	4.6	25.4	0.0
All	35,733	2.1	7.9	194.6	15,383	2.7	12.5	135.7

TABLE 6 - SMARTPHONE VIDEO VIEWING QUINTILES

BASED ON ADULTS 18+ USAGE OF VIDEO ON APPS/WEB

	Q3 20	14	Q3 20	013
SMARTPHONE QUINTILES	# OF PERSONS (000)	TPP (HH:MM:SS)	# OF PERSONS (000)	TPP (HH:MM:SS)
Smartphone 1	25,121	7:03:11	20,098	5:45:49
Smartphone 2	25,140	1:14:32	20,120	0:54:52
Smartphone 3	25,135	0:26:17	20,114	0:19:47
Smartphone 4	25,140	0:08:23	20,129	0:06:14
Smartphone 5	25,148	0:01:09	20,125	0:00:52
All	125,684	1:46:40	100,586	1:25:27

TABLE 7 - TELEVISION DISTRIBUTION SOURCES

NUMBER OF HOUSEHOLDS (IN 000'S)

	COMPOSITE		BL	BLACK		HISPANIC		MERICAN
	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013
Broadcast Only	12,167	11,183	2,017	1,899	2,920	2,592	643	606
Wired Cable (No Telco)	52,986	56,123	7,309	7,691	5,674	6,344	2,007	2,153
Telco	12,887	11,581	1,722	1,455	1,467	1,284	650	632
Satellite	34,723	35,110	3,759	3,662	5,373	5,533	750	904
Broadband Only	2,572	n/a	181	n/a	244	n/a	246	n/a



TABLE 8 - CABLE/SATELLITE HOMES WITH INTERNET STATUS

NUMBER OF HOUSEHOLDS (IN 000'S)

	СОМР	OSITE	BLACK		HISPANIC		ASIAN AMERICAN	
	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013
Broadcast Only and Broadband Access	6,358	5,422	614	521	1,030	793	455	434
Broadcast Only and No Internet/ Narrowband Access	6,257	6,200	1,336	1,316	1,743	1,648	167	134
Cable Plus and Broadband Access	80,661	78,819	8,445	8,081	8,926	8,913	3,389	3,366
Cable Plus and No Internet/ Narrowband Access	20,009	21,345	4,108	4,304	3,347	3,668	231	264

TABLE 9 - DEVICES IN TV HOUSEHOLDS

PERCENTAGE OF HOUSEHOLDS

	СОМР	OSITE	BL	ACK	HISP	ANIC	ASIAN AI	MERICAN
	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013	Q3 2014	Q3 2013
DVD/Blu-Ray Player	81%	83%	77%	79%	78%	80%	73%	76%
DVR	49%	49%	44%	41%	41%	40%	41%	45%
High Definition TV	86%	83%	84%	78%	89%	84%	86%	91%
Video Game Console	46%	46%	47%	46%	54%	55%	52%	53%
Tablet	44%	28%	37%	22%	43%	25%	62%	45%
Enabled Smart TV	12%	7%	9%	5%	15%	7%	23%	15%
Subscription Video on Demand	40%	35%	31%	28%	39%	34%	54%	47%

TABLE 10 - TELEVISION DISTRIBUTION SOURCES BY ETHNICITY

PERCENTAGE OF HOUSEHOLDS

MARKET BREAK	COMPOSITE	WHITE	BLACK	HISPANIC	ASIAN AMERICAN
Broadcast Only	10%	10%	12%	17%	14%
Wired Cable (No Telco)	46%	46%	49%	37%	47%
Telco	12%	11%	12%	10%	16%
Satellite	30%	31%	26%	35%	17%
Broadband Only	2%	2%	1%	2%	6%

EXHIBIT 2 - MOBILE DEVICE PENETRATION BY ETHNICITY



SOURCING & METHODOLOGIES

GLOSSARY

AM/FM RADIO: Listening to programming from AM/FM radio stations or network programming.

BROADBAND ACCESS: Paid, high-speed Internet access delivered via DSL, Cable Internet through cable provider, Fiber-Optic Service, U-Verse, Satellite Internet, Data Card (aircard that connects to a cellular phone network) or PC tethered to cell phone (cellular phone network).

BROADBAND ONLY: A household with at least one operable TV/monitor that receives video exclusively through a broadband internet connection instead of traditional means (over the air, wired cable, telco, satellite).

BROADCAST ONLY: A mode of television content delivery that does not involve satellite transmission or cables (i.e.—a paid service). Also commonly referred to as "over-the-air."

CONNECTED TV: A TV that is either directly connected to a broadband connection or has a broadband capability through a device connected to it.

MULTIMEDIA DEVICE: Viewing on an Apple TV, Boxee, Roku, Google Chromecast, or other internet connected device through the television. This does not include DVD / Blu-Ray Devices, Game Consoles, or Computers.

NARROWBAND ACCESS: A household that accesses the Internet via a telephone line (often referred to as dial-up).

SATELLITE: A paid TV subscription where the signal is distributed to an orbiting satellite. The amplified signal is then re-transmitted to the home and received via a dish. (Sometimes also referred to as "dish.")

SMART TV: A household with at least one television set that is capable and enabled to access the internet.

SUBSCRIPTION VIDEO ON DEMAND (SVOD): a household with access to a subscription video on demand service, such as Netflix, Amazon Prime and Hulu Plus.

TELCO: A paid TV subscription delivered fiber-optically via a traditional telephone provider.

TRADITIONAL TV: Watching live or time-shifted content on a television set.

TV HOUSEHOLD: A home with at least one operable TV/monitor with the ability to deliver video via traditional means of antennae, cable STB or Satellite receiver and/or with a broadband connection.

WIRED CABLE: Traditional cable delivered through wires to your home.

TELEVISION METHODOLOGY

"On Traditional TV" includes Live usage plus any playback viewing within the measurement period. Time-shifted TV is playback primarily on a DVR but includes playback from video on demand, DVD recorders, server based DVR's and services like Start Over. "On Traditional TV" reach includes those viewing at least one minute within the measurement period. This includes Live viewing plus any playback within the measurement period. Third Quarter 2014 Television data is based on the following measurement interval: 06/30/14-09/28/14. As of February 2011, "DVR Playback" has been incorporated into the Persons Using Television (PUT) statistic.

Metrics for "Using a DVD/Blu-Ray Device" and "Using a Game Console" are based on when these devices are in use for any purpose, not just for accessing media content. For example, "Using a Game Console" will also include time when the game console is being used to play video games.

Data used in this report is inclusive of multicultural audiences. Hispanic consumer audiences are comprised of both English and Spanish speaking representative populations.

ONLINE METHODOLOGY

In July 2011, an improved hybrid methodology was introduced in Nielsen's NetView and VideoCensus product. This methodology combines a census level accounting of page views and video streams where Nielsen measurement tags have been deployed in order to project audience and behavior to the full universe of all Internet users. For VideoCensus, the portion of the total video streams calibrated by census data, previously allocated to Home/Work computers, are now allocated to other devices and locations such as smartphones and viewing outside of home and work. This change affects both "Watching Video on the Internet" and "Using the Internet" figures. Beginning in Q1 2012, Cross-Platform metrics are derived from the new hybrid panel. Year-over-year trends are available beginning in Q3 2012. Data should not be trended to previous quarters' published editions.

Hours:minutes for Internet and video use are based on the universe of persons who used the Internet/watched online video. All Internet figures are weekly or monthly averages over the course of the quarter. All "Using the Internet on a Computer" metrics are derived from Nielsen NetView, while all "Watching Video on the Internet" metrics are derived from Nielsen VideoCensus. "Watching Video on the Internet" is a subset of "Using the Internet on a Computer."

Due to the release of the Google Chrome browser v.19 in May 2012, some Nielsen NetView data for a small number of sites that have extensive use of HTTPS is under reported for May and June 2012. A solution has been implemented for July 2012 reporting. This affects "Using the Internet on a Computer" during this time.

YouTube Partner reporting became available through Nielsen VideoCensus featuring May 2012 data. YouTube Partner data is reported as individual channels under the YouTube brand in Nielsen VideoCensus. Data for each YouTube partner is aggregated across two entity levels, the broadest as Nielsen VideoCensus channel entity and the more granular being Nielsen VideoCensus client-defined entity. This affects "Watching Video on Internet" during this time.

Due to a processing error, YouTube brand-level stream and duration metrics were inflated from May 2012 – May 2013 which impacted "Watching Video on Internet." The current report contains the corrected metrics for the prior year data in the year-over-year comparisons. However, because of an additional processing issue that occurred in Q2 2012 (above note), the Q2 2012 data could not be restated and is based on the originally released data points.

As of January 2014, two factors led to an increase in "Watching Video on the Internet." Secure or https streaming of videos was added into reporting for entities such as Facebook. Additionally, YouTube mobile streams became included within the hybrid reporting.

As a result of a Google Chrome update in late August, some panelists using Google Chrome had their Nielsen meter extension disabled resulting in the underreporting of passively measured https, or secure content in the September 2014 Netview and VideoCensus data.

Separately, a brief interruption in YouTube video tags occurred on September 9 through September 11, 2014. As a result of this issue, combined with the Google Chrome issue, aggregate monthly VideoCensus data for YouTube brand and channels, as well as Total line metrics, were underreported for stream metrics.

AM/FM RADIO METHODLOGY

Audience estimates for 48 large markets are based on a panel of people who carry a portable device called a Personal People Meter (PPM) that passively detects exposure to content that contains inaudible codes embedded within the program content. Audience estimates from the balance of markets and counties in the U.S. are based on surveys of people who record their listening in a written diary for a week.

The estimates in this report are based on RADAR and the National Regional Database. RADAR reports national network radio ratings covering the U.S. using both PPM and Diary measurement and it is based on a rolling one-year average of nearly 400,000 respondents aged 12+ per year.

Monthly Radio Estimates: Nielsen's Measurement Science group used statistical modeling techniques to estimate the total cume audience to radio in a four week period, as compared to the total cume audience to radio in an average week. The methodology utilized PPM panel data, and essentially measured how many people who were not exposed to radio in a single week might typically be exposed to radio over a consecutive four week period. A radio cume growth factor was then determined and applied to radio listening on a national basis.

Listening to HD radio broadcasts, Internet streams of AM/FM radio stations and Satellite Radio is included the Persons Using Radio estimates in this report where the tuning meets our reporting and crediting requirements.

MOBILE METHODOLOGY

Nielsen's Electronic Mobile Measurement (EMM) is an observational, user-centric approach that uses passive metering technology on smartphones to track device and application usage on an opt-in convenience panel. Results are then reported out through Nielsen Mobile NetView 3.0. There are approximately 5,000 panelists in the U.S. across both iOS and Android smartphone devices. This method provides a holistic view of all activity on a smartphone as the behavior is being tracked without interruption.

A number of steps are taken after the data collection process to ensure the reported data is representative of the mobile population. Weighting controls are applied across five characteristics (gender, age, income, race and ethnicity) while independent enumeration studies are carried out on a continuous basis to provide the most current estimates of the mobile population (aka Universe Estimation). This mobile population is drawn from a combination of Mobile Insights, as well as surveying the National People Meter (NPM) panel that is the industry standard for TV Ratings.

Figures reported in Nielsen's Mobile NetView 3.0 include those individuals who are P18+ who have used an iOS or Android smartphone device in the U.S. during Q3 of 2014. In particular:

"Using any App/Web on a Smartphone" refers to consuming mobile media content through a web browser or via a mobile app. It does not include other types of activity such as making/ receiving phone calls, sending SMS/MMS messages etc, which has been excluded for this report.

"Watching Video on a Smartphone" is a subset of "Using any App/Web on a Smartphone" and refers to those individuals who visit a website or use a mobile app specifically designed to watch video content.

Due to this methodology change from survey based data to EMM as of the Q4 2013 Cross Platform Report report, data should not be trended to previous quarters' published editions. The current report contains the revised metrics for the prior year data in the year-over-year comparisons.

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TABLES 1, 2, 3, 4 - A WEEK IN THE LIFE, OVERALL USAGE BY MEDIUM, MONTHLY TIME SPENT BY MEDIUM IN HOURS:MINUTES USERS 2+, MONTHLY TIME SPENT BY MEDIUM IN HOURS: MINUTES

Source: Traditional TV, Time-shifted TV, DVD, Game Consoles, Multimedia Devices 06/30/14-09/28/14 via Nielsen NPOWER/NPM Panel, Online 07/01/14-09/30/14 via Nielsen Netview and Nielsen VideoCensus, Mobile 07/01/14-09/30/14 via Nielsen Electronic Mobile Measurement, Radio 06/20/13-06/18/14 via RADAR 122.

Table 1 is based on the total U.S. population whether or not they have the technology.

Tables 2-4 are based on users of each medium.

Electronic Mobile Measurement is based on P18+. Radio RADAR 122 data is based on P12+. Therefore, P2+ would be based on P18+ for Smartphone and P12+ for Radio.

TABLE 5 – CROSS-PLATFORM HOMES RANKED BY IN-HOME BEHAVIOR

Source: 07/01/14-09/30/14 via Nielsen NPOWER/Cross-Platform Homes Panel for P2+. Internet and Streaming based on home PC only.

TABLE 6 - SMARTPHONE VIDEO VIEWING QUINTILE

Source: 07/01/14-09/30/14 via Electronic Mobile Measurement for P18+. Smartphone video viewing quintiles are grouped based on users' time per person per month watching video on a Smartphone. It refers to those individuals who visit a website or use a mobile app specifically designed to watch video content.

TABLE 7, 8-TELEVISION DISTRIBUTION SOURCES, CABLE/SATELLITE HOMES WITH INTERNET STATUS

Source: Based on the Universe Estimates for the 15th of each month within the quarter via Nielsen NPOWER/NPM Panel.

TABLE 9, 10 - DEVICES IN TV HOUSEHOLDS, TELEVISION DISTRIBUTION SOURCES - PERCENTAGE OF HOUSEHOLDS

Source: Based on the scaled installed counts for the 15th of each month within the quarter via Nielsen NPOWER/NPM Panel.

Within Table 9, prior year based on Q1 2014 for Subscription Video on Demand. High Definition TV break is now based on High Definition Capable/Receivable Homes.

EXHIBIT 1 – AVERAGE TIME SPENT PER ADULT 18+ PER DAY

Source: Live TV, Time-shifted TV, DVD, Game Consoles, Multimedia Devices 06/30/14-09/28/14 via Nielsen NPOWER/NPM Panel, Online 07/01/14-09/30/14 via Nielsen Netview, Mobile 07/01/14-09/30/14 via Electronic Mobile Measurement, Radio 06/20/13-06/18/14 via RADAR 122.

Exhibit 1 is based on users of each medium.

EXHIBIT 2 - MOBILE DEVICE PENETRATION BY ETHNICITY

Source: Mobile 07/01/14-09/30/14 via Nielsen Mobile Insights.

Note: - represents insufficient sample size while n/a represents data unavailability.

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Source: Smartphone P13+ September 2014 via Nielsen Mobile Insights, Smart TV and Multimedia Devices HHLD September 2014 via Nielsen Custom data, Other devices HHLD September 2014 based on the scaled installed counts via Nielsen NPOWER/NPM Panel. Prior year based on January 2014 for Subscription Video on Demand and October 2013 for Broadband Only Households.

PAGES 6

Digital Video: Video content viewed on a computer or mobile device. Includes "Watching Video on the Internet" and "Watching Video on a Smartphone."

TV Screen: Viewing on a TV screen originating from the television or any device connected to the television. This would include when these devices are in use for any purpose, not just for accessing media content. Includes "On Traditional TV," "Using a DVD / Blu-Ray Device," "Using a Game Console," and "Using a Multimedia Device."

DAILY TIME SPENT -

Source: Traditional TV, DVD, Game Consoles, Multimedia Devices 06/30/14-09/28/14 via Nielsen NPOWER/NPM Panel; Online 07/01/14-09/30/14 via Nielsen VideoCensus; Mobile 07/01/14-09/30/14 via Nielsen Electronic Mobile Measurement

Based on users of each medium.

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Nielsen Custom Data, P18+ based on average monthly usage

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Nielsen Proprietary custom analysis. P_{2+} and P_{18-49} ratings trends over multiple seasons of each show (show 1, 2, 3, 4). Measurement period and SVOD date availability varies by show.

ABOUT NIELSEN

Nielsen N.V. (NYSE: NLSN) is a global information and measurement company with leading market positions in marketing and consumer information, television and other media measurement, online intelligence and mobile measurement. Nielsen has a presence in approximately 100 countries, with headquarters in New York, USA and Diemen, the Netherlands.

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues Case No. ER-2014-0258 for Electric Service.

AFFIDAVIT OF TRINA MUNIZ

STATE OF MISSOURI

) ss **CITY OF ST. LOUIS**)

Trina Muniz, being first duly sworn on her oath, states:

)

1. My name is Trina Muniz. I work in the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a Ameren Missouri as Manager, Marketing & Advertising.

Attached hereto and made a part hereof for all purposes is my Rebuttal 2.

Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of

18 pages and Schedule(s) TJM-R1 , all of which have been

prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Subscribed and sworn to before me this <u>16th day of <u>January</u> Bickie <u>A. Eaus</u></u> _, 2015.

My commission expires:

2-21-18

BECKIE J. EAVES Notary Public - Notary Seal State of Missouri Commissioned for St. Louis City My Commission Expires: February 21, 2018 Commission Number: 149