

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of:)
)
Carriage Complaint Against)
)
Service Electric Cablevision, Inc.)
)
by) File No. _____
)
Western Pacific Broadcast, LLC)
)
With Respect to Carriage Within the)
Philadelphia, PA Designated Market Area,)
of Local Commercial Television Station WACP,)
Licensed to Atlantic City, New Jersey)

Directed to: The Chief, Media Bureau

**PETITION FOR SPECIAL RELIEF
BY ORDER OF CARRIAGE**

Western Pacific Broadcast, LLC (“Western Pacific”), pursuant to FCC Rules 76.7 and 76.61, hereby respectfully requests that the Bureau order Service Electric Cablevision, Inc. (“Service Electric”) to carry local commercial television station WACP, licensed to serve Atlantic City, NJ (“WACP”), in accordance with the Commission’s must carry rules and policies on Service Electric’s cable system(s) within the Philadelphia, PA designated market area (the “DMA”) for the remaining duration of the current must carry election cycle, expiring December 31, 2014.

In support of this petition, the following is respectfully submitted:

I. Factual Background

This Petition is being filed in an abundance of caution so as to avoid the prospect that Western Pacific’s rights to a Bureau order compelling Service Electric to observe Western

Pacific's must carry rights will lapse while Service Electric and Western Pacific attempt to finalize plans for the carriage of WACP. Service Electric's attorneys and undersigned counsel have been in frequent contact concerning the technical aspects of carrying WACP, and we hope to clarify those technical aspects in the next several weeks. In that event, Western Pacific will dismiss this Petition.

Service Electric is a cable operator within the DMA. WACP is a new commercial television station, which commenced operation this summer. As a result of its status as a new station, Rule 76.64(f)(4) required it to notify local cable operators of WACP's initial election of carriage status within a window 60 days prior to commencing broadcasting and 30 days after commencing broadcasting. In accordance with that requirement, Western Pacific notified Service Electric by two identical letters dated June 6, 2012 that WACP was commencing operation and elected mandatory carriage on Service Electric's cable systems operating in the DMA.¹ That letter was sent by certified mail and was received by Service Electric on June 11, 2012.² Under Rule 76.64(f)(4), that initial election took effect 90 days after it was made, which in the case of Service Electric was September 9, 2012.

Service Electric did not contact Western Pacific to make arrangements for carriage of WACP during that 90-day notice period. According, by letter dated September 14, 2012, Western Pacific demanded carriage of WACP pursuant to Rule 76.61(a)(1)³ to start the formal

¹ A copy of that letter appears in **Exhibit 1**. The attachment to the letter is a list of all Service Electric CUIDs within the DMA as of the date of the letter.

² Copies of the US Post Office delivery receipts appear in **Exhibit 2**. Letters were sent to Service Electric at two addresses. Both letters were received on June 11, 2012.

³ This Rule states:

(1) Whenever a local commercial television station or a qualified low power television station believes that a cable operator has failed to meet its carriage or channel positioning obligations, pursuant to §§ 76.56 and 76.57, such station shall

process that would allow Western Pacific to obtain a Bureau order compelling carriage in the event that negotiated efforts to arrange for carriage proved unsuccessful.⁴

Service Electric responded preliminarily to Western Pacific's carriage demand by a letter dated October 1, 2012.⁵ In this letter, Service Electric stated that its engineers tried without success to receive the WACP signal, and "would be happy to discuss your payment of the cost to deliver a signal consistent with Section 76.55(c)(3), however, given the distance between the station's transmitter and our headend, it is highly unlikely that WACP will be able to deliver a qualified signal." The letter closed with an invitation to have the WACP management or engineers contact Service Electric.

By letter dated October 16, 2012, Service Electric provided a formal response to Western Pacific's carriage demand letter.⁶ In this letter, counsel to Service Electric alleged that WACP was not a local commercial television station as to Service Electric because the station's signal is not a good quality signal at the Service Electric principal headend. According to this letter, the WACP signal was of "borderline strength... [and] is subject to tiling and freezing." The letter closed with the invitation to "contact me if your client is interested in discussing potential solutions to these issues."

As this October 16, 2012 letter discussed, but did not provide, signal measurement results or a report, undersigned counsel called Service Electric's counsel to arrange for the delivery of

notify the operator, in writing, of the alleged failure and identify its reasons for believing that the cable operator is obligated to carry the signal of such station or position such signal on a particular channel

⁴ The demand letter, which appears in **Exhibit 3**, was sent to Service Electric, at two separate addresses. As shown in post office return receipt notices appearing in **Exhibit 4**, those letters were received by Service Electric on September 19 or September 20.

⁵ This letter was received on October 4, 2012. A copy of this October 15, 2012 letter appears in **Exhibit 5**.

⁶ A copy of this letter appears in **Exhibit 6**. It was received by undersigned counsel on October 18, 2012.

the signal measurement report to Western Pacific. Service Electric's counsel sent the report to the undersigned counsel by email on October 22, 2012.⁷ This report revealed that the measured strength of the WACP signal at the headend met the good quality signal standard. During subsequent calls between Service Electric's counsel and Western Pacific's counsel, it was determined that the picture quality issues are manageable.

Recently, counsel for Service Electric asked undersigned counsel if Western Pacific would be willing to accept carriage on a channel different from WACP's virtual channel, as Service Electric had recently placed another TV broadcast station on that channel. In addition, Service Electric's counsel also raised a potential distant signal copyright royalty issue. Specifically, the DMA headend serves also serves communities in a neighboring DMA where the WACP signal would be considered distant. Counsel for Service Electric informed undersigned counsel that it was his understanding that the additional copyright liability was in the range of a couple of thousand dollars a year and asked undersigned counsel if Western Pacific would indemnify Service Electric for this additional liability. Counsel for Western Pacific responded that Western Pacific would probably be willing to provide that indemnification, given its small amount, but would like to get a more precise understanding of the amount of the liability and whether the WACP signal could be excluded from carriage in this neighboring DMA before agreeing to that indemnity. Most recently, Service Electric proposed to carry WACP in SD format on channel 16, and to take responsibility for the additional copyright fees as well as the costs required to ensure that a good quality signal is received. Service Electric has not offered to carry WACP in HD format, even though the station broadcasts in that format.

As of the date of this Petition, that is where this matter lies.

⁷ A copy of this email and the measurement report appears in **Exhibit 7**.
(00465726-1)

II. Discussion

Considering the foregoing, Western Electric respectfully requests that the Bureau order Service Electric to carry the WACP primary signal as required by the Commission's must carry rules and policies, subject to the conditions that (1) Western Pacific provide Service Electric with an indemnification as required by *Implementation of the Cable Television Consumer Protection and Competition Act of 1992*, 8 FCC Rcd 4142, 4144-4145 (1993) in the event that Service Electric is not able to exclude the WACP signal from the portions of its system serving non-DMA communities, and (2) that Service Electric cooperate with Western Pacific to resolve any issues related to the undertaking of this indemnification and to any signal-to-noise problems with the WACP signal as may exist.

Service Electric has the burden of showing that WACP is not entitled to carriage if WACP is a commercial television station local to the DMA.⁸ As shown below, WACP is a commercial television station that is local to the DMA.

(a) *Service Electric Is a Cable Operator in the DMA.*

Service Electric is a cable operator that operates one or more cable systems serving the DMA, as demonstrated by the Commission's list of community unit identification numbers for the counties within the DMA.⁹

(b) *WACP Is Entitled to Mandatory Carriage on Service Electric's Cable System in the DMA.*

WACP is entitled to carriage on cable systems located in the DMA if it is a "local commercial television station," as that term is defined in Rule 76.55(c). WACP is a commercial

⁸ *Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Broadcast Signal Carriage issues*, 8 FCC Rcd 2965, 2990 ¶102 (1993).

⁹ A list of the CUID's assigned as of June 2012 to the three Service Electric cable operators within the DMA is attached to the letter appearing in **Exhibit 1**.

television station that is local to the DMA. In this regard, the Station is licensed to serve the community of Atlantic City, New Jersey, which is within the same television market as the cable system(s) operated by Service Electric in the DMA.¹⁰ WACP is licensed and operating on a channel regularly assigned to its community of license, channel 4.¹¹ Finally, WACP either delivers a good quality signal to the principal headend of the cable system(s), or is entitled to carriage despite the delivery of a lower quality signal due to the Western Pacific's undertaking to be responsible for the costs of delivering a good quality signal or a baseband video signal to the cable system(s). WACP has been operating within the DMA since June of this year and did not elect to reserve its retransmission consent rights with respect to any cable system or area of the DMA for the current must carry election cycle.

This Petition was preceded by both a written must carry election delivered to Service Electric and a subsequent written demand for carriage delivered to Service Electric. As explained in detail above, Service Electric has not identified any defense to the request for carriage. Service Electric's signal measurements confirm that WACP is a good quality signal. While Service Electric has reported to WACP that some tiling and freezing has been observed, it is our understanding that this is not at a level which is problematic. Moreover, in instances in which interference creates a signal-to-noise ratio that is problematic, the Commission has still granted the carriage request and has required carriage to commence in 60 days, with an instruction to the parties to cooperate to resolve the interference. *Richard C. and Lisa A. Goetz*, CSR-7736-M, at 4 (July 7, 2008) (Senior Deputy Chief, Policy Division, Media Bureau). Western Pacific would accept such a condition is the requested Bureau carriage order.

¹⁰ *Broadcasting & Cable Yearbook*, at B-156 (ProQuest, LLC 2009).

¹¹ Channel 4 is a DTV allotment assigned to Atlantic City by Rule 73.622(i).

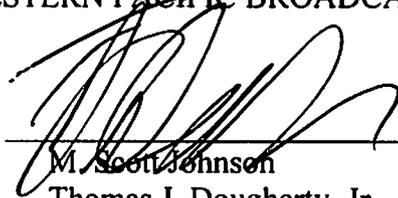
II. Conclusion

WHEREFORE, the foregoing premises considered, Western Pacific Broadcast, LLC hereby respectfully requests that the Commission order Service Electric to carry the Station in accordance with the must carry rules and policies for the remaining duration of the current must carry election cycle, expiring December 31, 2014, subject to the conditions described in Section II of this Petition.

Respectfully submitted,

WESTERN PACIFIC BROADCAST LLC

By: _____



M. Scott Johnson
Thomas J. Dougherty, Jr.
Its Counsel

FLETCHER, HEALD & HILDRETH, PLC
1300 North 17th Street, Suite 1100
Arlington, VA 22209
(703) 812-0400

December 14, 2012

EXHIBIT 1



Fletcher, Heald & Hildreth

1300 NORTH 17th STREET, 11th FLOOR
ARLINGTON, VIRGINIA 22209

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THOMAS J. DOUGHERTY, JR.
(703) 812-0409
DOUGHERTY@FHHLAW.COM

June 6, 2012

Via Certified Mail, Return Receipt Requested

Mr. Donald Brandt
Service Electric Cablevision Inc.
4949 Liberty Lane
Allentown, Pennsylvania 18106

Via Certified Mail, Return Receipt Requested

President or CEO
Service Electric Cablevision Inc.
1045 Hamilton Street
Allentown, Pennsylvania 18101

Re: Mandatory Carriage Election for WACP, Atlantic City, NJ

Dear Mr. Brandt and President or CEO:

Pursuant to Section 614 of the Communications Act of 1934, as amended, and Section 76.64(f)(4) of the rules of the Federal Communications Commission, this will inform you that Western Pacific Broadcast, LLC, the licensee of Television Station WACP, Atlantic City, NJ (the "Station") hereby elects mandatory carriage of the Station's television signal pursuant to Section 76.56(b) on all cable systems operated by any one or more of Service Electric Cablevision Inc. or its direct or indirect subsidiaries or affiliates to the extent they serve the Philadelphia, PA Designated Market Area ("DMA), including without limitation those community units listed on Exhibit A hereto. Carriage is sought solely within the DMA. The Station is a new station that is licensed to Atlantic City, NJ, which is part of the DMA. The Station is scheduled to begin commercial broadcasting on June 8, 2012. The Station will present the programming of Cannella Response Television, LLC, as well as other offerings of high quality programming. With reference to FCC Rule 76.56(b)(5), the Station will not substantially duplicate the signal of any other local commercial television station that is carried or retransmitted on your systems within the DMA and will not have a network affiliation duplicating that of a local commercial television station carried on your systems within the DMA.

The Station is assigned virtual channel 4 and elects carriage on that channel as of right under FCC Rule 76.57. Please be advised for purposes of complying with the FCC's material degradation requirement that the station will commence broadcast with one program stream employing virtually the entire bit stream (19.4 mbps) of the channel.

The Station is a local commercial television station as to all cable systems operating in the DMA, as defined in FCC Rule 76.55(c). For purposes of that definition, please be advised that in the event that the Station does not deliver an over the air signal of good quality as specified in FCC Rule 76.55 (c)(3) to

the principal headend(s) [as defined in FCC Rule 76.5(pp)] of the cable systems covered by this election, the Station will be responsible for providing equipment and bearing the costs of delivering such requisite signal of good quality to those headend(s) as required to comply with FCC Rule 76.55 (c), including without limiting the foregoing, the costs for any needed specialized equipment. Please note that this correspondence is not a demand for carriage; rather it is the election notice new stations are required to make under FCC Rule 76.64(f)(4).

Official correspondence in connection with this letter should be directed to the undersigned at the Fletcher, Heald & Hildreth, PLC address on this letterhead as the Station's contact person, with a copy to Mr. Bray at the address below.

Please contact the undersigned if you should have any questions concerning this matter.

Sincerely,



M. Scott Johnson

Thomas J. Dougherty, Jr.
Counsel for and Acting on Behalf of
Western Pacific Broadcast, LLC

cc: Matthew J. Bray, Vice President
Western Pacific Broadcast, LLC
400 N. Ashley Dr. Suite 3010
Tampa, FL 33602

EXHIBIT A - SERVICE ELECTRIC CABLEVISION

Comm. Unit	Comm. Name	County Name	Legal Name	PSID	Address	City	ST
PA0972	CUMRU	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA1030	ST LAWRENCE	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2411	EARL	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2412	CAERNARVON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0213	BIRDSBORO	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0215	EXETER	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0216	ROBESON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0283	RICHMOND	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0284	RUSCOMBMANOR	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2666	KUTZTOWN	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2667	LYONS STATION	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2668	TOPTON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2669	MAXATAWNY	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2670	LONGSWAMP	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2671	ROCKLAND	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2745	HEREFORD	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	1045 HAMILTON STREET	ALLENTOWN	PA
PA2760	BRECKNOCK	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3142	OLEY	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3253	DISTRICT	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3470	PIKE	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0253	RIEGELSVILLE	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0256	BRIDGETON	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0866	SPRINGFIELD	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0948	TINICUM	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1970	NOCKAMIXION	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2059	DURHAM	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2176	HAYCOCK	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2658	RICHLAND	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3452	MILFORD	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2369	HONEY BROOK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA

PA2410	HONEY BROOK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2624	ELVERSON	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3062	WARWICK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3696	EAST NANTMEAL	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0289	EMMAUS	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0290	MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0291	LOWER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0293	SALISBURY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0294	UPPER MILFORD	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0478	ALLENTOWN	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0854	ALBURTIS	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0855	COOPERSBURG	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0856	SALISBURY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0857	WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0858	SOUTH WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0859	UPPER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0860	UPPER SAUCON	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0861	CATASAUQUA	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0862	LOWER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0867	FOUNTAIN HILL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1336	LOWER MILFORD	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1373	WEISENBERG	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1374	LOW HILL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1378	NORTH WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1674	HANOVER	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2111	COPLAY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2220	LYNN	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0092	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0097	EASTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0098	FORKS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0099	GLENDON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0108	PALMER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0109	PLAINFIELD	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0112	STOCKERTOWN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA

PA0115	WEST EASTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0117	WILLIAMS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0118	WILSON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0195	BANGOR	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0197	EAST BANGOR	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0198	ROSETO	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0250	LOWER NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0251	NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0252	WILLIAMS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0254	TATAMY	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0255	UPPER NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0413	PORTLAND	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0479	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0863	HELLERTOWN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0864	LOWER SAUCON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0865	HANOVER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0920	UPPER MOUNT BETHE	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0921	PEN ARGYL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0922	WASHINGTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0923	WIND GAP	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0924	PLAINFIELD	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0951	BUSHKILL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0952	PALMER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1028	FREEMANSBURG	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1341	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1342	EAST ALLEN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1368	MOORE	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1583	LOWER MT BETHEL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1974	BATH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2528	ALLEN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2709	NORTH CATASAUQUA	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2964	LOWER MT BETHEL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3225	CHAPMAN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3453	NORTHAMPTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA

Source: FCC Website List of CUIDs

EXHIBIT 2

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Donald Brandt
 Service Electric Cablevision Inc.
 4949 Liberty Lane
 Allentown, PA 18106

2. Article Number
(Transfer from service label)

7011 0470 0000 9266 4784

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Benedict Martin* Agent
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

President or CEO
 Service Electric Cablevision Inc.
 1045 Hamilton Street
 Allentown, PA 18101

2. Article Number
(Transfer from service label)

7011 0470 0000 9266 4791

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *R Kelly* Agent
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

Ryan Kelly *6/8/12 K.*

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

EXHIBIT 3



Fletcher, Heald & Hildreth

1300 NORTH 17th STREET, 11th FLOOR
ARLINGTON, VIRGINIA 22209

OFFICE: (703) 812-0400
FAX: (703) 812-0486
www.fhhlaw.com
www.commlawblog.com

M. SCOTT JOHNSON
(703) 812-0474
SJOHNSON@FHHLAW.COM

THOMAS J. DOUGHERTY, JR.
(703) 812-0409
DOUGHERTY@FHHLAW.COM

September 14, 2012

Via Certified Mail, Return Receipt Requested

Mr. Donald Brandt
Service Electric Cablevision Inc.
4949 Liberty Lane
Allentown, Pennsylvania 18106

Via Certified Mail, Return Receipt Requested

President or CEO
Service Electric Cablevision Inc.
1045 Hamilton Street
Allentown, Pennsylvania 18101

Re: Mandatory Carriage Election for WACP, Atlantic City, NJ

Dear Mr. Brandt and President or CEO:

This letter is being delivered to you on behalf of Western Pacific Broadcast, LLC, the licensee of local commercial Television station WACP, licensed on channel 4 to serve the community of Atlantic City, NJ. This letter is a demand for carriage under FCC Rule 76.61(a)(1).

By letter dated June 6, 2012, and received by your office on June 8,¹ you were informed that WACP was commencing operation as a local commercial television station in the Philadelphia, PA Designated Market Area (the "DMA") and had elected mandatory carriage status.² As stated in that letter, as a cable operator within the DMA, FCC Rule 76.64(f)(4) required you to commence carriage of WACP by the date that is 90 days after that election. That 90 day period has ended, and our investigation has revealed that your system(s) within the DMA is not carrying WACP. This failure to commence continuous carriage within that 90 day period is a violation of FCC Rules, as well as the Communications Act of 1934, as amended. Although you received our carriage election notice, we have not received any communication from you indicating that you have a valid defense to carriage.

To be clear, WACP is entitled to carriage on your cable system(s) within the DMA. WACP has properly elected must carry status, and is a commercial television station which is local to the DMA.

¹ See U.S. Postal Service return receipt notification and Track & Confirm attached to this letter.

² A copy of that letter is attached.

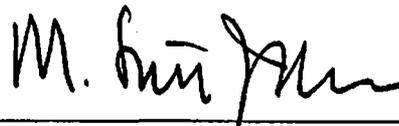
Under FCC Rule 76.61(a)(2), you are required to respond to this letter in writing within 30 days of your receipt of this letter, and to either commence to carry the WACP signal in accordance with the terms requested in the attached carriage election letter or to state your reasons (if any) for believing that you are not obligated to carry the WACP signal.

It is our hope that carriage of the WACP signal on your cable system(s) within the DMA will commence promptly, and that this dispute will end with that carriage.

Official correspondence in connection with this letter should be directed to the undersigned at the Fletcher, Heald & Hildreth, PLC address on this letterhead as the Station's contact person, with a copy to Mr. Bray at the address below.

Please contact the undersigned if you should have any questions concerning this matter.

Sincerely,



M. Scott Johnson
Thomas J. Dougherty, Jr.
Counsel for and Acting on Behalf of
Western Pacific Broadcast, LLC

cc: Matthew J. Bray, Vice President
Western Pacific Broadcast, LLC
400 N. Ashley Dr. Suite 3010
Tampa, FL 33602



Fletcher, Heald & Hildreth

1300 NORTH 17th STREET, 11th FLOOR
ARLINGTON, VIRGINIA 22209

OFFICE: (703) 812-0400
FAX: (703) 812-0486
www.fhhlaw.com
www.commlawblog.com

M. SCOTT JOHNSON
(703) 812-0474
SJOHNSON@FHHLAW.COM

THOMAS J. DOUGHERTY, JR.
(703) 812-0409
DOUGHERTY@FHHLAW.COM

June 6, 2012

Via Certified Mail, Return Receipt Requested

Mr. Donald Brandt
Service Electric Cablevision Inc.
4949 Liberty Lane
Allentown, Pennsylvania 18106

Via Certified Mail, Return Receipt Requested

President or CEO
Service Electric Cablevision Inc.
1045 Hamilton Street
Allentown, Pennsylvania 18101

Re: Mandatory Carriage Election for WACP, Atlantic City, NJ

Dear Mr. Brandt and President or CEO:

Pursuant to Section 614 of the Communications Act of 1934, as amended, and Section 76.64(f)(4) of the rules of the Federal Communications Commission, this will inform you that Western Pacific Broadcast, LLC, the licensee of Television Station WACP, Atlantic City, NJ (the "Station") hereby elects mandatory carriage of the Station's television signal pursuant to Section 76.56(b) on all cable systems operated by any one or more of Service Electric Cablevision Inc. or its direct or indirect subsidiaries or affiliates to the extent they serve the Philadelphia, PA Designated Market Area ("DMA"), including without limitation those community units listed on Exhibit A hereto. Carriage is sought solely within the DMA. The Station is a new station that is licensed to Atlantic City, NJ, which is part of the DMA. The Station is scheduled to begin commercial broadcasting on June 8, 2012. The Station will present the programming of Cannella Response Television, LLC, as well as other offerings of high quality programming. With reference to FCC Rule 76.56(b)(5), the Station will not substantially duplicate the signal of any other local commercial television station that is carried or retransmitted on your systems within the DMA and will not have a network affiliation duplicating that of a local commercial television station carried on your systems within the DMA.

The Station is assigned virtual channel 4 and elects carriage on that channel as of right under FCC Rule 76.57. Please be advised for purposes of complying with the FCC's material degradation requirement that the station will commence broadcast with one program stream employing virtually the entire bit stream (19.4 mbps) of the channel.

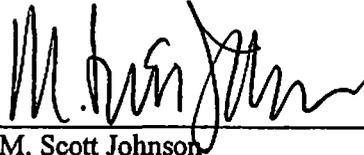
The Station is a local commercial television station as to all cable systems operating in the DMA, as defined in FCC Rule 76.55(c). For purposes of that definition, please be advised that in the event that the Station does not deliver an over the air signal of good quality as specified in FCC Rule 76.55 (c)(3) to

the principal headend(s) [as defined in FCC Rule 76.5(pp)] of the cable systems covered by this election, the Station will be responsible for providing equipment and bearing the costs of delivering such requisite signal of good quality to those headend(s) as required to comply with FCC Rule 76.55 (c), including without limiting the foregoing, the costs for any needed specialized equipment. Please note that this correspondence is not a demand for carriage; rather it is the election notice new stations are required to make under FCC Rule 76.64(f)(4).

Official correspondence in connection with this letter should be directed to the undersigned at the Fletcher, Heald & Hildreth, PLC address on this letterhead as the Station's contact person, with a copy to Mr. Bray at the address below.

Please contact the undersigned if you should have any questions concerning this matter.

Sincerely,



M. Scott Johnson
Thomas J. Dougherty, Jr.
Counsel for and Acting on Behalf of
Western Pacific Broadcast, LLC

cc: Matthew J. Bray, Vice President
Western Pacific Broadcast, LLC
400 N. Ashley Dr. Suite 3010
Tampa, FL 33602

EXHIBIT A - SERVICE ELECTRIC CABLEVISION

Comm. Unit	Comm. Name	County Name	Legal Name	PSID	Address	City	ST
PA0972	CUMRU	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA1030	ST LAWRENCE	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2411	EARL	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2412	CAERNARVON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0213	BIRDSBORO	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0215	EXETER	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0216	ROBESON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0283	RICHMOND	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0284	RUSCOMBMANOR	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2666	KUTZTOWN	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2667	LYONS STATION	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2668	TOPTON	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2669	MAXATAWNY	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2670	LONGSWAMP	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2671	ROCKLAND	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2745	HEREFORD	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	1045 HAMILTON STREET	ALLENTOWN	PA
PA2760	BRECKNOCK	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3142	OLEY	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3253	DISTRICT	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3470	PIKE	BERKS	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0253	RIEGELSVILLE	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0256	BRIDGETON	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0866	SPRINGFIELD	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0948	TINICUM	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1970	NOCKAMIXION	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2059	DURHAM	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2176	HAYCOCK	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2658	RICHLAND	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3452	MILFORD	BUCKS	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2369	HONEY BROOK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA

PA2410	HONEY BROOK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA2624	ELVERSON	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3062	WARWICK	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA3696	EAST NANTMEAL	CHESTER	SERVICE ELECTRIC CABLEVISION INC	001704	4949 LIBERTY LANE	ALLENTOWN	PA
PA0289	EMMAUS	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0290	MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0291	LOWER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0293	SALISBURY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0294	UPPER MILFORD	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0478	ALLENTOWN	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0854	ALBURTIS	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0855	COOPERSBURG	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0856	SALISBURY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0857	WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0858	SOUTH WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0859	UPPER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0860	UPPER SAUCON	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0861	CATASAUQUA	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0862	LOWER MACUNGIE	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0867	FOUNTAIN HILL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1336	LOWER MILFORD	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1373	WEISENBERG	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1374	LOW HILL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1378	NORTH WHITEHALL	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1674	HANOVER	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2111	COPLAY	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2220	LYNN	LEHIGH	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0092	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0097	EASTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0098	FORKS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0099	GLENDON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0108	PALMER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0109	PLAINFIELD	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0112	STOCKERTOWN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA

PA0115	WEST EASTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0117	WILLIAMS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0118	WILSON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0195	BANGOR	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0197	EAST BANGOR	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0198	ROSETO	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0250	LOWER NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0251	NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0252	WILLIAMS	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0254	TATAMY	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0255	UPPER NAZARETH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0413	PORTLAND	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0479	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0863	HELLERTOWN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0864	LOWER SAUCON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0865	HANOVER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0920	UPPER MOUNT BETHE	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0921	PEN ARGYL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0922	WASHINGTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0923	WIND GAP	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0924	PLAINFIELD	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0951	BUSHKILL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA0952	PALMER	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1028	FREEMANSBURG	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1341	BETHLEHEM	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1342	EAST ALLEN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1368	MOORE	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1583	LOWER MT BETHEL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA1974	BATH	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2528	ALLEN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2709	NORTH CATASAUQUA	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA2964	LOWER MT BETHEL	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3225	CHAPMAN	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA
PA3453	NORTHAMPTON	NORTHAMPTON	SERVICE ELECTRIC CABLEVISION INC	001711	1045 HAMILTON STREET	ALLENTOWN	PA

Source: FCC Website List of CUIDs

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

7011 0470 0000 9266 4784

Postage	\$ 1.10	
Certified Fee	2.75	
Return Receipt Fee (Endorsement Required)	2.35	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$6.40	

Sent To: Mr. Donald Brandt
 Street, Apt. No., or PO Box No.: Service Electric Cablevision Inc.
 4949 Liberty Lane
 City, State, ZIP+4: Allentown, PA 18106

PS Form 3800, August 2006 See Reverse for Instructions

*Received 6/11/2012
 MBG*

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

 Mr. Donald Brandt
 Service Electric Cablevision Inc.
 4949 Liberty Lane
 Allentown, PA 18106

2. Article Number
 (Transfer from service label)

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *Renee D. Martin* Agent Addressee
 B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

7011 0470 0000 9266 4784

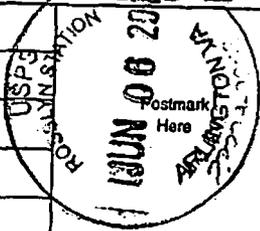
U.S. Postal Service
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

7011 0470 0000 9266 4791

Postage	\$ 1.10
Certified Fee	2.55
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.40



Sent To: President or CEO
 Street, Apt. No., or PO Box No.: Service Electric Cablevision Inc.
 1045 Hamilton Street
 City, State, ZIP+4: Allentown, PA 18101

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

President or CEO
 Service Electric Cablevision Inc.
 1045 Hamilton Street
 Allentown, PA 18101

2. Article Number
 (Transfer from service label)

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *R Kelly* Agent Addressee

B. Received by (Printed Name): Ryan Kelly
 C. Date of Delivery: 6/11/12

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

Received 6/11/2012 MBG

7011 0470 0000 9266 4791

English

Customer Service

USPS Mobile

Register / Sign In



Search USPS.com or Track Packages

Quick Tools

Ship a Package

Send Mail

Manage Your Mail

Shop

Business Solutions

Track & Confirm

You entered: 70110470000092664784

Status: Delivered

Your item was delivered at 12:29 pm on June 08, 2012 in ALLENTOWN, PA 18106.
Additional information for this item is stored in files offline.

You may request that the additional information be retrieved from the archives, and that we send you an e-mail when this retrieval is complete. Requests to retrieve additional information are generally processed within four hours. This information will remain online for 30 days.

I would like to receive notification on this request

Find Another Item

What's your label (or receipt) number?

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EXHIBIT 4

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Donald Brandt
 Service Electric Cablevision Inc.
 4949 Liberty Lane
 Allentown, PA 18106

2. Article Number

(Transfer from service label)

7009 0080 0001 3561 9470

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-154

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Revised Martin* Agent Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes No
If YES, enter delivery address below

*Received 9/19/2012
MBG*

3. Service Type

- Certified
- Registered
- Insured

4. Restricted

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

President or CEO
 Service Electric Cablevision Inc.
 1045 Hamilton Street
 Allentown, PA 18101

2. Article Number

(Transfer from service label)

7009 0080 0001 3561 9463

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-154

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Janet Diamond* Agent Addressee

B. Received by (Printed Name)

C. Date of Delivery

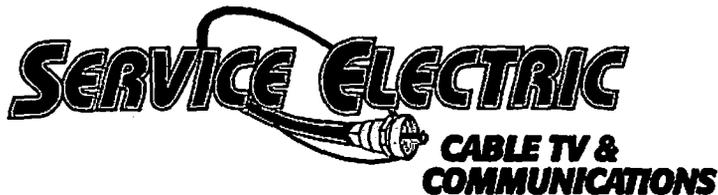
*Received 9/20/2012
MBG*

- Yes
- No

4. Restricted Delivery? (Extra Fee)

- Yes

EXHIBIT 5



2260 Avenue A • LVIP #1 • Bethlehem, PA 18017-2170
Phone 610-865-9100 • Fax 610-865-5031

October 1, 2012

Via Certified Mail, Return Receipt Requested

M. Scott Johnson
Fletcher Heald & Hildreth
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209

*Received 10/4/2012
MBJ*

Thomas J. Dougherty, Jr.
Fletcher Heald & Hildreth
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209

RE: Carriage Request of WACP (Ch 4, Atlantic City, New Jersey)

Dear Counsel:

We are in receipt of your letter dated the 14th of September 2012 which demands carriage of television broadcast station WACP (Ch 4, Atlantic City, New Jersey) on our Allentown, Pennsylvania cable television system. The original letter dated the 6th of June 2012, by its explicit terms, was not a demand for carriage, but rather a notice of intent to begin operations. Please be advised, therefore, that your letter of the 14th of September 2012 is the first demand for carriage that we received.

Our principal headend for the system, as defined at Section 76.5(pp) of the FCC's rules and regulations, is located at Bethlehem Pennsylvania at 40 35' 55" – 75 25' 12". According to our calculations the transmitter for WACP is over 72 miles from the system's principal headend.

On the 18th of July 2012 and then again on the 25th of September, our engineers attempted to receive the broadcast signal of channel 4 at our principal headend. They were not able either time to receive a signal from channel 4. If you wish, we would be happy to discuss your payment of the cost to deliver a signal consistent with Section 76.55(c) (3), however, given the distance between the station's transmitter and our headend, it is highly unlikely that WACP will be able to deliver a qualified signal.

We look forward to hearing from Matthew Bray or the station's engineers.

Sincerely,

A handwritten signature in black ink that reads "Joseph G. Macus".

Joseph G. Macus
Vice President

cc Matthew J. Bray

EXHIBIT 6

October 16, 2012

By Certified Mail, Return Receipt Requested

M. Scott Johnson, Esquire
Thomas J. Dougherty, Jr., Esquire
Fletcher, Heald & Hildreth
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209

Re: **Western Pacific Broadcast, LLC Demand for Mandatory Carriage of WACP (Atlantic City, New Jersey) on Service Electric Cablevision, Inc. Cable Television Systems Serving the Counties of Berks, Bucks, Chester, Lehigh, and Northampton, Pennsylvania**

Dear Mr. Johnson and Mr. Dougherty:

This firm represents Service Electric Cablevision, Inc. (“**Service Electric**”) and its subsidiaries. Service Electric received your letter, dated September 14, 2012, demanding mandatory carriage of television station WACP (Atlantic City, New Jersey) on Service Electric’s cable television systems serving the above-referenced Pennsylvania counties (the “**Demand Letter**”). This is a response to your demand pursuant to Section 76.61(a)(2) of the rules of the Federal Communications Commission (“**FCC**”), 47 C.F.R. § 76.61(a)(2).

As an initial matter, your Demand Letter wrongly accuses Service Electric of violating the FCC’s Rules (the “**Rules**”) and unspecified provisions of the Communications Act (the “**Act**”). Contrary to the Demand Letter’s misleading and inaccurate assertions, neither Section 76.64(f)(4) nor any other provision of the Rules or the Act required Service Electric to commence carriage of WACP within ninety days after the station’s initial mandatory carriage election, respond to WACP’s initial election, or provide WACP with a “valid defense to carriage.”

In fact, Section 76.64(f)(4) of the Rules governs only when a new television station such as WACP is required to elect either retransmission consent or mandatory carriage and the effective date of that election. Section 76.64(f)(4) imposes no obligation on Service Electric to respond to WACP’s election notice, to carry WACP, or to explain the meaning or operation of the Rules to WACP. Moreover, Section 76.64(f)(3) is irrelevant to whether WACP is eligible for mandatory carriage on Service Electric’s cable systems (which it is not).

The Rules that actually apply to carriage of WACP (Atlantic City, NJ) demonstrate that the station is not a local commercial television station within the meaning of Section 76.55(c) the Rules because WACP fails to provide a good-quality signal or a good-quality picture to Service Electric’s principal headend in Berks County, Pennsylvania (40°17’14.3”N, 75°53’41.7”W (NAD 83)). Service Electric conducted a signal strength and picture quality test of WACP’s signal in accordance with good engineering practices and the FCC’s standards. Pursuant to Section 76.61(a)(2) of the Rules, the signal test, which is voluminous and can be provided upon request,

Mr. M. Scott Johnson
Mr. Thomas J. Dougherty, Jr.
October 16, 2012
Page 2

includes a list of the equipment used to make the measurements, the point of measurement, and a list and detailed description of the reception and over-the-air signal processing equipment used, including specifications for each piece of equipment used in the test, a block diagram, and a description of the methodology Service Electric used for processing the signal. The signal test confirms that WACP provides signal of borderline strength and in any event fails to provide a good quality picture to Service Electric's principal headend. The picture quality in particular is substandard, is subject to tiling and freezing, and cannot be retransmitted to Service Electric's customers consistent with Service Electric's and the FCC's standards.

WACP's inability to provide a good-quality signal or picture is unsurprising given the one hundred mile distance between Service Electric's principal headend in rural Pennsylvania and WACP's Atlantic City, New Jersey city of license. This distance exceeds the distance between Atlantic City and New York City, the distance between Philadelphia and New York City, and the distance between Philadelphia and Baltimore. WACP and the Service Electric cable communities in rural Pennsylvania also are separated by significant geographic barriers such as the sprawling Philadelphia metropolitan area. Moreover, as a station essentially broadcasting exclusively "infomercials," WACP fails to provide any local programming relevant to the Service Electric communities. Such programming is, however, provided in abundance by truly local broadcasters carried on Service Electric's cable system who provide local news, sports, and weather programming as well as coverage of other events of concern to the communities. In short, even if WACP were to provide a good-quality signal to Service Electric, which it fails to do, the station should not be considered a local commercial television station entitled to mandatory carriage in the Service Electric cable communities.

WACP's failure to provide a good-quality signal, the great distance between the station and the Service Electric communities, and WACP's failure to offer programming directed to Service Electric's communities notwithstanding, Service Electric believes that an extended proceeding before the FCC regarding these matters will be a needless expenditure of time and resources for both parties. Please contact me if your client is interesting in discussing potential solutions to these issues.

Sincerely,



Gary S. Lutzker
Counsel for Service Electric Cablevision, Inc.

GSL/sad

cc: Mr. Mark Walter
Mr. Donald Brandt
Ms. Mary Ann Fronheiser
Mr. Matthew J. Bray

EXHIBIT 7

Tom J. Dougherty

From: Lutzker, Gary [glutzker@dowlohnes.com]
Sent: Monday, October 22, 2012 12:38 PM
To: Tom J. Dougherty; Scott Johnson
Subject: WACP Signal Test Report; Service Electric Cablevision, Inc. Birdsboro, PA Cable System
Attachments: WACP FCC Signal Strength Report 9 25 12-c.pdf; AT2500RQ-c.pdf; CommscopeP3.500 JCA specs-c.pdf; Wade_J-283X (Spec Sheets)-c.pdf

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Tom and Scott:

Attached as we discussed is the signal strength test Service Electric performed on September 25. Also attached are the block diagram and the specification sheets for the antenna, download wire, and spectrum analyzer.

Sincerely,
Gary

Gary S. Lutzker | Dow Lohnes PLLC
Member | (P): 202-776-2107 | (F): 202-776-4107 |
(M): 202-415-2813 | glutzker@dowlohnes.com
18513.0009

REPORT OF SIGNAL STRENGTH TEST

1. I am Tom Breneman and I currently hold the position of Broadband Specialist with Service Electric Cablevision, Inc. I have 11 years experience in the cable television industry.

2. On September 25, 2012, I conducted a test of the signal strength of WACP(TV), Channel 4, Atlantic City, New Jersey, at the headend facility for the SECV Birdsboro cable system with the assistance of the following experienced Service Electric cable technician: Dino D'Angelo, Telecom Engineer.

3. The Gibraltar SECV headend is located 40°17'14.3"N, 75°53'41.7"W (NAD 83) at Ridgewood Road, Robeson Township, Berks County, Pennsylvania. We conducted the test by measuring the signal strength with an antenna mounted on an existing tower in a position parallel to the ground at a height of 80 feet. The antenna was properly oriented toward the television station's transmitter site at (according to the FCC's database) 39°44'05"N, 74°50'29"W (NAD 27).

4. The test used the following equipment:

Antenna Information		Signal Processing Equipment		Downlead Wire	
Manufacturer	WADE	Make:	Sunrise	Make:	Comscope
Make:	VHF/UHF	Model:	AT2500	Model:	.500 cable
Model:	J283-X1	Age:	5 Years	Age:	5 years
Age:	3years	Calibration Date:	8-9-12	Length:	120 Feet

Attached hereto is a true and correct copy of a block diagram depicting the configuration of the equipment used in the signal strength test. Also attached hereto are the spec sheets for the antenna, the signal processing equipment, and the downlead wire.

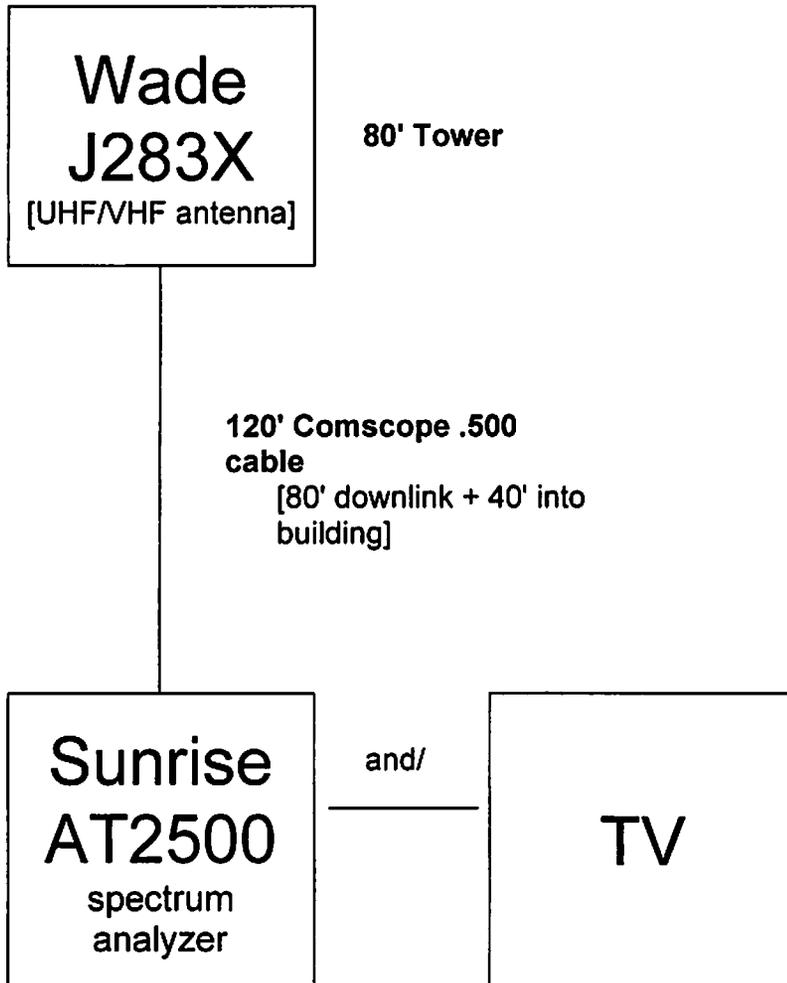
5. The signal strength test produced the following measurements:

Time	Signal Strength (dBm)	Weather_Conditions	Temp	Picture Quality
10:00 am	-60.8 dBm	Sunny	59°	Good
4:00 pm	-61.0 dBm	Sunny	71°	Some tiling and freezing with picture quality distortions
10:00 pm	-58.9 dBm	Mild Cool	64°	Good
4:00 am	-61.0 dBm	Mild Cool	61°	Some tiling and freezing with picture quality distortions

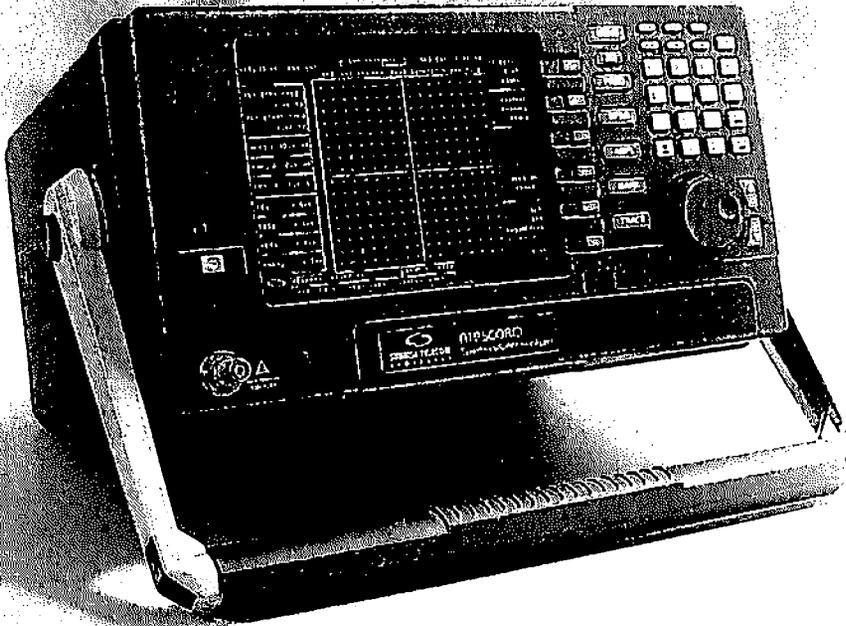
6. The signal quality at each measurement was borderline at best and the picture quality was intermittently distorted beyond that of the poorest quality signal carried on the system. In particular, when we viewed the picture on a monitor at the headend, we observed significant tiling and picture freezing at approximately thirty (30) second intervals, which would fail to meet the FCC's technical standards if the signal were retransmitted to Service Electric's customers. WACP could not be watched during this time and failed both Service Electric's minimum quality standards and those of its franchising authorities.

Dated: September 26, 2012

Block Diagram Attachment associated with Paragraph 4.



AT2500RQ
CATV/QAM
SPECTRUM ANALYZER



*The world's only spectrum analyzer with
combined CATV and QAM
measurement capabilities*

Sunrise Telecom Broadband is dedicated to providing our customers with the best test equipment possible. That is why our engineers have created a lightweight, battery powered analyzer designed for CATV headend and field portable applications. It features powerful modular options that allow you to expand measurement capabilities for future technology or individual requirements. Integrating QAM digital measurements into an affordable portable spectrum analyzer such as the Sunrise AT2500RQ is truly a breakthrough from both a cost and performance point of view.

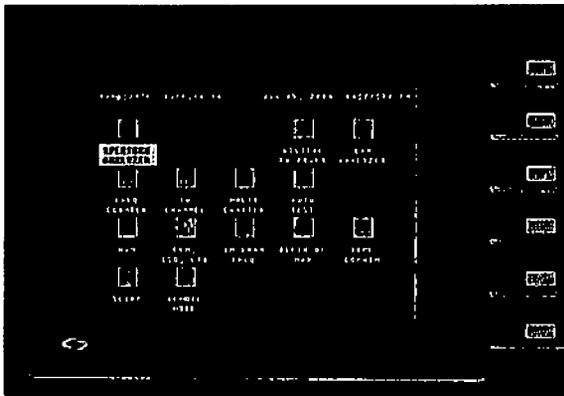
JUST ANOTHER WAY
WE'RE UNCOMPLICATING CABLE



SUNRISE TELECOM
B R O A D B A N D

...with high sensitivity and the fastest scan speed of any CATV spectrum analyzer, the AT2500RQ catches ingress others miss

DESIGNED SPECIFICALLY FOR CATV



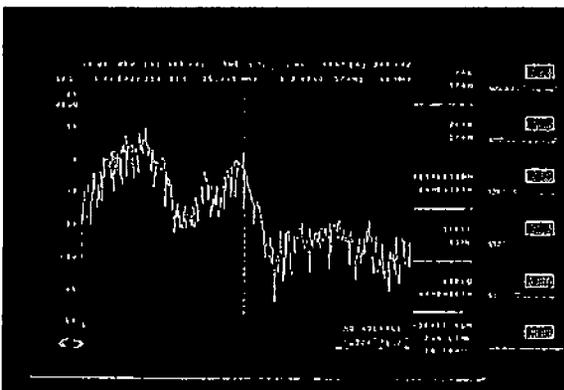
Easy access to all modes from the Main Menu

Today's broadband network technicians face the challenge of keeping the cable plant operating at peak performance at all times. To diagnose and correct problems, they need to be able to perform sophisticated tests and get accurate results quickly, so an instrument has to be reliable and easy to use.

Designed with PC technology in mind, the Sunrise AT2500RQ is a lightweight, full featured 1.5 GHz spectrum analyzer. This unit is built to withstand the rigors of field use. With its durable, water-resistant ABS plastic housing and wide temperature range, you can use the analyzer in all weather conditions.

The built-in battery with over 2-hour continuous operating time makes working in the field easier. You can also use Sunrise's Windows-based software packages to remotely access the AT2500RQ via Ethernet over any TCP/IP network.

SPECTRUM ANALYZER



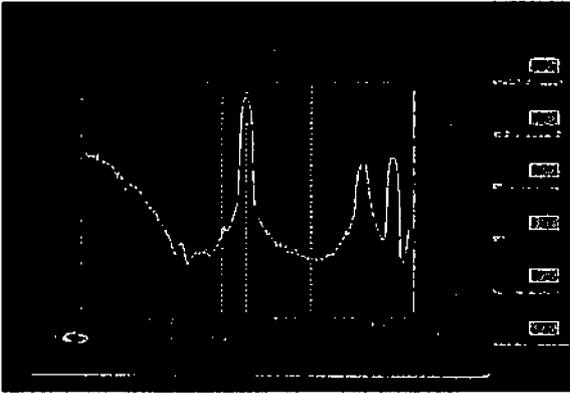
Reverse path ingress is easily captured with high speed scan

The 1.5 GHz AT2500RQ has intelligent band select filters that can automatically filter the input signal to prevent overloading, allowing this high sensitivity analyzer to be used to measure low level signals in a fully loaded cable system.

Finding ingress on the reverse path can be a challenge, especially since much of the ingress is either fast transients, lasting only fractions of a second, or system noise. With the fastest scan speed of any CATV spectrum analyzer the AT2500RQ can scan a 50 MHz span in only 2 ms, ensuring all the transient ingress is caught.

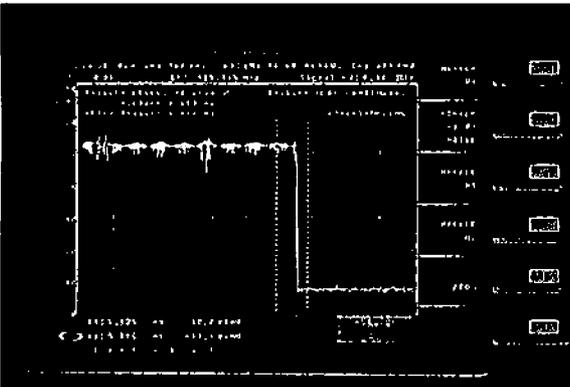
The technician never has to worry about calibration because an intelligent AUTO-CALIBRATION system maintains specified accuracy throughout the operating temperature range. Full auto-calibration is achieved within a minute of turning the unit on.

CATV PACKAGE



Combined CCN, CSO and CTB Tests

TIME DOMAIN MODULE



Time Domain Measurement

... measure CCN, CSO & CTB accurately and in-service!

All CATV tests, including complete in-service RF testing for Proof-of-Performance, can be executed quickly and accurately and without customer service interruptions:

- Carrier Level
- Carrier Frequency
- Hum
- CCN (Carrier to Composite Noise)
- CSO (Composite Second Order)
- CTB (Composite Triple Beat) In-Service Measurement available
- DFI (Discrete Frequency Interference) Measurement Mode
- ICR (In-Channel Response)
- DOM (Depth of Modulation)
- Digital Channel Power

All these tests are easily performed by using the icons shown on the main menu.

CCN, CSO, CTB, DFI, Hum, In-Channel Frequency Response and Depth of Modulation can all be performed in-service with the proper VITS test signal inserter in the very accurate and reliable Gated Mode. With its high sensitivity, the Sunrise AT2500RQ can measure CCN ratios of better than 60 dB with only a 5 dBmV carrier level, eliminating the need for an external amplifier even at test points or subscriber drop levels.

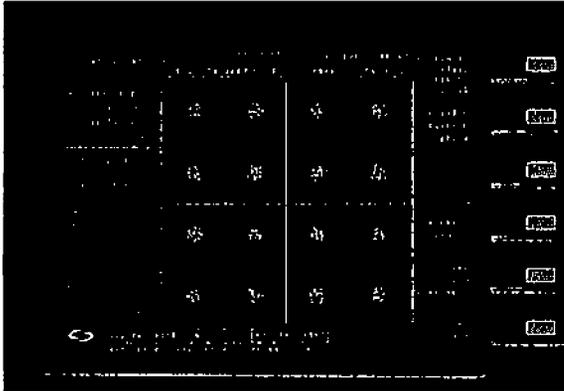
The internal high/low pass preselection filters automatically filter out-of-band energy to provide improved dynamic range for measurements in a fully loaded cable system.

TDM mode simplifies analysis of upstream cable modem bursty signals and intermittent ingress for quick and accurate measurements. Because today's advanced services can have many different TDMA (Time-Division Multiple- Access) signals assigned to a particular frequency, the TDM module is standard on Sunrise AT2500 Series spectrum analyzers. This Time Domain Module eliminates the guesswork by providing quick and accurate analysis of complex upstream FSK, QPSK, and 16 QAM pulsed amplitude RF signals.

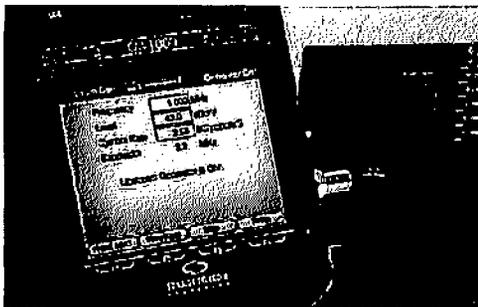
The comprehensive Time Domain Measurement mode fully utilizes the power of the Sunrise AT2500RQ's built-in triggered gating hardware capabilities to capture and isolate a signal source. Each packet of data from a cable modem's TDMA upstream signal can be captured, seen, and measured thanks to flexible control settings such as Trigger Level, Holdoff, Horizontal Sweep Time, delay after trigger, bandwidth correction, averaging, etc. The TDM mode allows fast, simple, and accurate in-service measurements, including an estimated channel power of the upstream DOCSIS channel, S/N of the burst (or DAJ), and the burst level of the modems.

...the AT2500RQ QAM Analyzer is an essential tool for ensuring that revenue generating digital services remain operational.

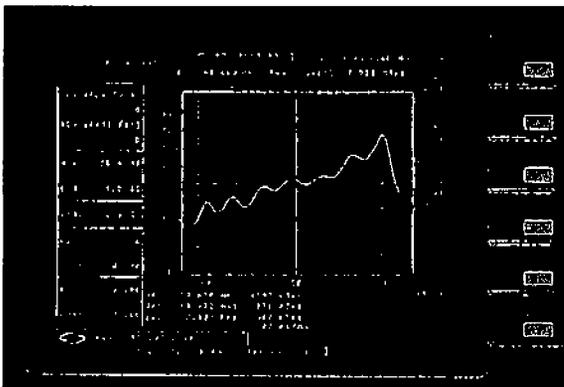
QAM DEMODULATOR OPTION



Constellation display of 16 QAM signal



Measure and characterize a network's return path performance using the AT2500RQ with a CM1000-USG unit



Zoomed Group Delay screen with Δ nsec per MHz measurements

As digital signals become part of our every day routine, performing accurate digital cable measurements is essential to efficiently install and maintain high quality level of service for your customers. Unlike analog pictures, digital video can appear to operate normally and yet it may be very close to failing. Digital measurements can be the only way to ensure that the system is operating well within limits. The digital channel power measurement allows accurate digital carrier power measurements over a desired bandwidth anywhere between 200 kHz and 1.5 GHz.

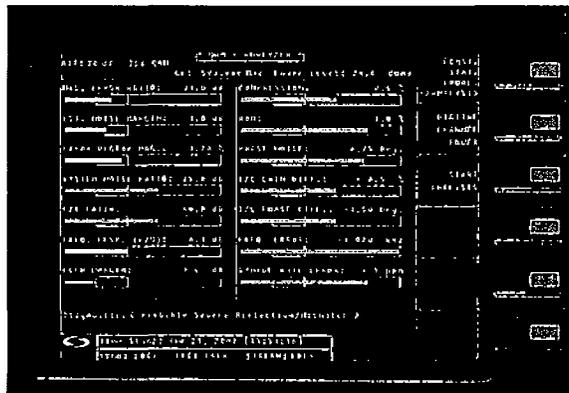
The Sunrise AT2500RQ QAM Analyzer demodulates and accurately measures the QAM signals carried through the cable system. It provides the measurement power the field technicians need for the latest 64/256 QAM digital technologies and is very simple to use, making the transition from analog to digital testing a breeze. The AT2500RQ displays Modulation Error Ratio (MER), pre and post Bit Error Rate (BER) and Error Vector Magnitude (EVM).

UPSTREAM SIGNAL GENERATOR MODULE

When paired with the CM1000-USG unit, an Upstream Signal Generator module and base unit, the AT2500 can demodulate a continuous 16 QAM in order to measure and characterize a network's return path performance. MER, Pre/Post BER, microreflections, linear and nonlinear distortions, as well as the reverse channel's frequency response and group delay characteristics can be precisely measured.



60 minute statistics screen showing signal impairments over time



QAM Impairment Analysis (QIA) displays 14 performance measurements on one screen

STATISTICS LOGGING

A statistics logging function is also included to test between 1–60 minutes with date/time reference, storing events of MER, Pre & Post BER, errored seconds, severely errored seconds, frame loss, and system unavailability. Up to 7 days of data can be captured with date/time reference using the WinQAM PC software.

QAM IMPAIRMENT ANALYSIS - *UNIQUE!*

MER measures the ratio of the average signal power in the ideal constellation to the average error power, and provides a good measure of signal quality. While MER is well established as the best overall "figure of merit" measurement to determine QAM signal quality, it does not indicate the type of impairment affecting a signal. For more in depth analysis to determine the cause of signal impairments, Sunrise developed the patent pending QAM Impairment Analysis (QIA) mode.

QIA mode calculates and displays:

- MER
- EVM
- C/I (Carrier to Interference)
- Echo margin
- Compression
- I/Q gain difference
- I/Q phase difference
- Phase noise
- Noise margin
- System noise ratio
- Frequency response
- Symbol rate error
- Hum
- Carrier offset

... QIA provides important insight into the source of digital impairments.

DIGITAL FEATURES

- 16/64/256 QAM DIGITAL MEASUREMENTS
- ITU-T J.83 ANNEX A, B & C COMPLIANT (DVS, DVB, DOCSIS, EURODOCSIS)
- HIGH RESOLUTION CONSTELLATION DISPLAY WITH ZOOM
- DATA LOGGING MODE OVER 1-60 MINUTES
- ADAPTIVE EQUALIZER DISPLAY WITH IN CHANNEL FREQUENCY RESPONSE AND GROUP DELAY
- RETURN PATH TESTING AND QUALIFICATION FOR VoIP
- MODULATION ERROR RATIO (MER) MEASUREMENT
- PRE AND POST BIT ERROR RATE TESTING (BER), REAL TIME AND AVERAGE
- AUTO ATTENUATOR SEARCH TO INSURE OPTIMUM QAM MEASUREMENTS
- POLARITY AUTO SEARCH FOR IF OR UP CONVERTED CARRIER FREQUENCIES
- QAM IMPAIRMENT ANALYSIS MODE
- DUAL BAND 6 & 8 MHZ IF FILTERS AVAILABLE
- ASI MPEG TRANSPORT STREAM OUTPUT AVAILABLE

SPECIFICATIONS

FREQUENCY

Frequency range: 0 MHz–1.5 GHz
Calibrated frequency range: 5 MHz–1.5 GHz
Frequency Reference:
Aging: ± 1 PPM/Yr
Temperature Stability: ± 1 PPM (0°C to 50°C)
Frequency counter:
Accuracy: ± 1 PPM ± 1 count
Resolution: 10 Hz
Stability (Noise sidebands offset from CW signal):
-85 dBc / Hz @ ± 10 kHz offset typical

SPAN

Frequency Span:
Range: Variable from Max Span 1500 MHz to 100 kHz & Zero Span
Accuracy: < 2 PPM
Sweep Time:
Range: 2ms, 4ms, 10ms, 20ms, 50ms, 100ms, 200ms, 500ms, 1000ms,
2000ms, 5000ms
Stability: < 2 PPM
Sweep Trigger: Free Run, Pwr Lock and TV Frame
Resolution Bandwidth:
Range: 1 MHz, 300 kHz, 30 kHz & 10 kHz
Selectivity (60 dB / 3 dB Ratio): 5.3:1, 3:1, 2:1, 2:1
Accuracy: $\pm 5\%$
Video Bandwidth:
Range: 1 MHz, 100 kHz & 10 kHz

AMPLITUDE

Response Flatness: ± 0.75 dB (5–1500 MHz)
Sensitivity: -65 dBmV (300 kHz RBW) to +65 dBmV
Level accuracy: ± 0.75 dB @ 25°C
Level resolution: 0.1 dB

Impedance at RF Input: 75 ohm
Input Return Loss: >20 dB typical (>5 dB attenuation)
Maximum safe input: +68 dBmV
Spurious free dynamic range: > 70 dB
Internal calibrator: 48 MHz @ -5 dBmV
Up to 4 simultaneous traces on screen with Avg, Peak & Min Hold
Selectable Positive, Negative or Sample detector
Vertical, Horizontal & Tilt Markers
Peak Search, Next Peak & Tracking on Vertical Markers
Vertical scale: 10, 5, 2 dB/Division
BAND SELECT FILTERS (Auto or Manual) :
7 high pass filters, 7 low pass filters and 21 bandpass filter combinations.
High Pass Cutoff Frequencies: 35, 78, 164, 270, 360, 450, 540 MHz
Low Pass Cutoff Frequencies: 45, 88, 174, 280, 370, 460, 550 MHz

MECHANICAL

Size: 304 x 177 x 355 mm (12"W x 7"H x 14"D)
Weight: 10 Kg (22 pounds)
Temperature
Operating: 0 to 50°C (32 to 122°F)
Storage: -20 to 55°C (-4 to 131°F)
Display type: TFT Active Matrix Color LCD
Display size: 162.5 mm (6.4 inches)

POWER

Battery Type: Rechargeable lead acid, 12 Volt 7 Ah
Internal Battery Charger: Automatic Fast / Slow / Floating
Power Supply: PSU2065 100V/250V, 50/60 Hz,
16 VDC, 4.06 A
Charge Time: < 4 hours
Operating Time: >2 hours

CATV MEASUREMENT SPECIFICATIONS

Channel Selection:

Frequency, Channel Video, Channel Audio

Channel Plans:

Custom plans, NTSC (EIA, HRC, IRC), PAL (B/G, I, D) or other. Maximum of 350 signals (analog, digital, FM, upstream, test, etc.). PC-based and internal complete channel plan editor

TV Channel Amplitude Range:

-40 dBmV to +65 dBmV ± 0.75 dB for S/N > 30 dB

TV Visual Frequency:

Accuracy: Carrier Frequency, ± 1 PPM
Resolution: 10 Hz

Visual/Aural Delta Frequency:

Range: 1 - 10 MHz
Accuracy: ± 200 Hz
Resolution: 10 Hz

Visual/Aural Delta Amplitude: ± 0.75 dB for S/N > 30 dB

FM Deviation

Range: ± 150 kHz, de-emphasis 75 μ sec
Accuracy: ± 2 kHz, 1-75 kHz, ± 5 kHz to 150 kHz

HUM/LOW FREQ. DISTURBANCES

Modes: CW or Video (In-Service)

Range: 1-10%

Accuracy: $\pm 0.5\%$ from 1 to 5%, $\pm 1\%$ from 5 to 10%

MODULATION DEPTH

AM Range: 40 to 95%

Resolution: 0.1%

Accuracy: $\pm 1.5\%$ (CCN > 40 dB)

Signal type: VITS line with white reference

IN-CHANNEL RESPONSE

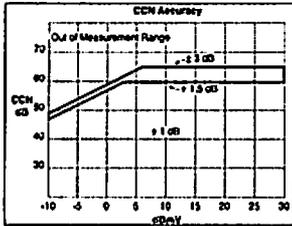
Range: ± 10 dB

Resolution: 0.1 dB

Accuracy: ± 0.25 dB

Signal type: VITS line with full amplitude CATV Multiburst signal, Video sweep or Ghost Canceling Reference signal

CARRIER-TO-COMPOSITE NOISE RATIO



Note: CCN specifications with band select filters on auto and 77 channel loading

Optimum Signal Range: +3 dBmV to +10 dBmV, noise measured with 0 dB Attenuation

CCN range: 60 dB with ± 1 dB accuracy, 65 dB with ± 3 dB accuracy

Resolution: 0.1 dB

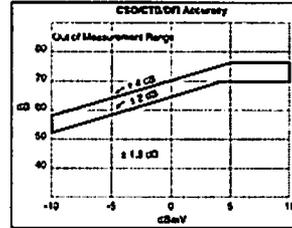
CSO/CTB/DFI

Optimum Signal Range: 0 dBmV to +4 dBmV, beat measured with 0 dB Attenuation

CSO/CTB/DFI Range: 64 dB with ± 1.5 dB

71 dB with ± 4 dB accuracy

Resolution 0.1 dB



Note: CSO, CTB and DFI specifications with band select filters on auto and 77 channel loading

TDM MEASUREMENT

Frequency Span: Zero Span

Horizontal Time: 50 μ sec to 500 msec

(1, 2, 5 settings)

Resolution Bandwidth: 1 MHz, 300 kHz, 30 kHz, 10 kHz

Video Bandwidth: 1 MHz, 100 kHz, 10 kHz

Bandwidth Correction Range: 10 kHz to 9.9 MHz

Pulse Level Accuracy: ± 0.75 dB in 5 μ sec, 1 MHz RBW

Trigger Modes: Free run, Continuous, Single

Trigger Level Range: -70 dBmV to +65 dB mV

Trigger Delay Range: 0 to 100 msec, in 1 μ sec steps

Trigger Holdoff Range: 50 μ sec to 100 msec,

in 1 μ sec steps

DIGITAL MEASUREMENT QAM 16/64/256 SPECIFICATIONS

Modulation Type: 16/64/256 QAM ITU-T J.83 Annex A, B & C (DVS, DVB, DOCSIS, EuroDOCSIS)

Constellation Display Size: 16, 64 and 256 QAM

Full constellation with zoom capability

Adaptive Equalizer Display - Number of Taps:

8 feed-forward; 24 feedback

Scale: +10 to -80 dBc

Mask: DOCSIS

Frequency response, over signal BW: +5 to -5 dB

Group Delay, over signal BW: -1000 to +1000 nsec

Digital Carrier Average Power Measurement

Amplitude Range: -30 to +65 dBmV

Resolution: 0.1 dB

Absolute Accuracy: ± 1.5 dB

Bandwidth Range: 200 kHz to 1.5 GHz

Modulation Error Ratio (MER)

Range: 22 to 40 dB

Accuracy: ± 1 dB typical

Error Vector Magnitude (EVM)

Range: 0.65% to 4.1%

Bit Error Rate (BER), Before and After R-S Decoding, per 1 second period

Range: 0 to 1.0×10^{-4}

Average Bit Error Rate (BER), Before and After R-S Decoding

Range: 0 to 1.0×10^{-4}

Estimated Noise Margin

Range: 1 to 12 dB

Accuracy: ± 1 dB typical

Statistics Logging

User-selectable Test Period: 1 to 60 minutes, up to 7 days with WinQAM

MER, Pre and Post BER, Errored Seconds, Severely Errored Seconds, Frame Loss, System

Unavailability time

Symbol Rate

Range: 1.28 to 7 MS / s

(Continuous QAM measurements at $<30^\circ\text{C}$)

Note: All specifications apply over the standard 0°C to +50°C operating temperature range, after a minimum of 2 hours of storage within the operating temperature range, if the unit is not fully at ambient temperature. The AT2500RQ meets all its specifications within 1 minute after it is turned on, providing that the AT2500RQ is within the one year calibration cycle. Sunrise Telecom Broadband's unique AutoCal feature assures accuracy by periodically self-testing and triggering a non-obstructive calibration, as required.

Specifications subject to change without notice.

FIELD-PROVEN SOLUTIONS

For detailed information on the AT2500R, visit our website at www.sunrisetelecom.com for the name of your local Sunrise representative. Or telephone us at 1.514.725.6652.

Sunrise Telecom Broadband is a leader in digital broadband and DOCSIS & EuroDOCSIS test instruments for the broadband industry. As part of the Sunrise Telecom family, we leverage the strength of one of the world's largest communications test and measurement companies.

Sunrise Telecom Broadband's field-proven solutions include installation and maintenance instruments; portable headend analyzers; and network test systems and software. Our goal is to enable service providers to rapidly deploy television, high-speed Internet, and digital video applications.

Based on our core strength in RF testing, we have established a successful track record as a provider of leading edge solutions that incorporate innovative test methods, intuitive user interfaces, and thorough product training. At Sunrise Telecom Broadband, we uncomplicate the cable broadband engineer's and field technician's day.

JUST ANOTHER WAY WE'RE UNCOMPLICATING CABLE



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International
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Anjou, QC Canada H1J 2T4

Corporate Head Office
Sunrise Telecom
302 Enzo Drive
San Jose, CA 95138 U.S.A.
1.408.363.8000
Fax: 1.408.363.8313

ORDERING INFORMATION

AT2500R 1.5 GHz PORTABLE CATV SPECTRUM ANALYZER

Includes:

PSU2065 Power Supply, Rechargeable lead acid battery,
User Manual, 2-Year Warranty, Padded Protective Soft Case
AT2VIDOUT Baseband NTSC video output
AT2VGAOUT VGA Output (15 Pin D Connector)
10Base-T Network connection (RJ45)
High/Low preselection filters
AT2CATVPAK CATV Measurement package
Carrier measurement, Precision frequency counter,
In-service Hum, CCN, CSO and CTB, Digital Channel Power
AT2TDM Time Domain Measurement package
A99026010 WinCom II Data Management Software (license for 1 PC)

AT2500RQ 1.5 GHZ PORTABLE CATV/QAM SPECTRUM ANALYZER

Includes all AT2500R features plus:

16/64/256 QAM Digital Measurement Analyzer
(Constellation, BER, MER Adaptive EQ, Data Logging)
AT2Q+QIA QAM+ Impairment Analysis Mode

OPTIONS AND ACCESSORIES

HARDWARE OPTIONS

These options are factory installed and must be ordered with product—requires AT2500RQ

AT2Q6-8 64/256 QAM RQ+ Euro/Annex A/B/C, Dual 6 - 8 MHz band width (Required for Annex A)
AT2Q-ASI MPEG ASI Output through BNC Connector

WINDOWS PC SOFTWARE FOR SUNRISE AT2500RQ (1 LICENSE PER PC)

Includes: CD, User Manual, A65000909 Serial Cable and A65000945 RJ-45 Ethernet Crossover Cable

A99026010 WinCom II - Data Management Software (licenses for additional PCs)
A99026020 WinRemote - Remote Control Spectrum Analyzer Software
A99026050 WinQAM - Remote Control QAM Digital Measurements Software (Requires AT2500RQ)

ACCESSORIES

A99025600 Padded Protective Soft Case for Sunrise AT2500RQ
A90093030 Model BTA Bucket Truck Adapter

CALIBRATION OPTIONS

AT-W32 3-Year Calibration Program
AT-W52 5-Year Calibration Program
AT2-CC Certificate of Calibration/compliance (N/C when requested at time of purchase)
AT2-CCM Certificate of Calibration/compliance with measurement data (requested at the time of purchase only)



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P3[®] 500 Series Cables

Product Descriptions

COMMSCOPE[®]

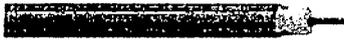
CommScope's P3[®] product line is the industry standard by which all coaxial trunk and distribution cables are measured. P3 has been proven robust and reliable by years of successful installations.

P3 500 is optimized for use in broadband feeder plants. Its small size, low attenuation and inherent strength has made it an industry standard.

Standard P3 Construction

A high precision aluminum outer conductor surrounds a high compression, micro-cellular foam dielectric core. The core contains a fully bonded copper clad center conductor.

Aerial Construction

Catalog Number	Description	Cable Weight	Shipping Weight	Standard Length
P3 500 CA 	offers all of P3's standard construction features (without a jacket)	72 lbs/kft (107 kg/km)	97 lbs/kft (144 kg/km)	2400 ft (732 m)
P3 500 JCA 	offers all of P3's standard construction features	95 lbs/kft (141 kg/km)	120 lbs/kft (179 kg/km)	2400 ft (732 m)
P3 500 JCAM 109 	has an integrated figure 8 galvanized solid steel messenger for self-supporting applications	134 lbs/kft (199 kg/km)	176 lbs/kft (262 kg/km)	2400 ft (732 m)

Underground Construction

Catalog Number	Description	Cable Weight	Shipping Weight	Standard Length
P3 500 JCASS 	features CommScope's Migra-Heal [®] flooding compound that seals jacket damage to inhibit corrosion	98 lbs/kft (146 kg/km)	123 lbs/kft (183 kg/km)	2400 ft (732 m)
P3 500 CableGuard[®] 	offers an outer jacket with compartmentalized cells, providing excellent cut-through and crush resistance	137 lbs/kft (204 kg/km)	181 lbs/kft (269 kg/km)	2400 ft (732 m)
P3 500 JACASS 	features CommScope's Migra-Heal [®] flooding compound, a bonded, corrugated, chrome-plated steel armor and dual polyethylene jackets for ultimate toughness	210 lbs/kft (313 kg/km)	254 lbs/kft (378 kg/km)	2400 ft (732 m)

Indoor/Riser Construction

Catalog Number	Description	Cable Weight	Shipping Weight	Standard Length
P3 500 JCAR 	has a flame-retardant polyethylene jacket that meets NEC's 820 riser rating	114 lbs/kft (170 kg/km)	138 lbs/kft (205 kg/km)	2400 ft (732 m)

Physical Dimensions

Component	Inches	mm
Nominal Center Conductor Diameter	0.109	2.77
Nominal Diameter Over Dielectric	0.450	11.43
Nominal Diameter Over Outer Conductor	0.500	12.70
Nominal Outer Conductor Thickness	0.024	0.61

Jacket Versions

Nominal Diameter Over Jacket	0.570	14.48
Nominal Jacket Wall Thickness	0.030	0.76
Nominal Diameter Over Flooded Jacket (JCASS)	0.570	14.48
Nominal Diameter Over CableGuard Jacket	0.750	19.07

Messenger Version

Diameter of Steel Messenger	0.109	2.77
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Armored Versions

Nominal Diameter Over Corrugated Armor	0.640	16.26
Nominal Armor Thickness	0.008	0.20
Nominal Diameter Over Outer Jacket	0.720	18.29
Nominal Thickness of Outer Jacket	0.040	1.02

Mechanical Characteristics

Minimum Bending Radius:	Standard		Bonded	
(No Jacket)	6.5 in.	16.5 cm	4.0 in.	10.2 cm
(Jacketed)	6.0 in.	15.2 cm	3.5 in.	8.9 cm
(Armored)	8.5 in.	21.6 cm	6.0 in.	15.2 cm
Maximum Pulling Tension	300 lbs.		136 kg.	
Minimum Breaking Strength (109) of Messenger	1,800 lbs.		816 kg.	

Electrical Characteristics

Capacitance	15.3 ± 1.0 pF/ft	50 ± 3.0 nF/km
Impedance	75 ± 2 ohms	
Velocity of Propagation	87%	

Nominal D.C. Resistance @ 68°F (20°C)

Copper Clad		
Inner Conductor	1.35 ohms/1000 ft.	4.43 ohms/km
Outer Conductor	0.37 ohms/1000 ft.	1.21 ohms/km
Loop	1.72 ohms/1000 ft.	5.64 ohms/km

Attenuation [@ 68° F. (20° C.)]

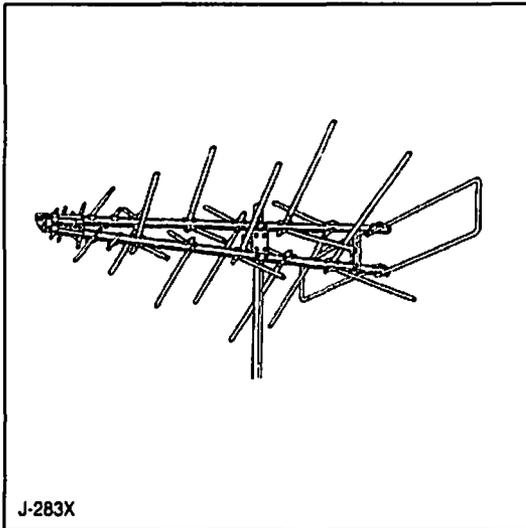
Frequency (MHz)	(dB/100 ft)		(dB/100 m)	
	Nominal	Maximum	Nominal	Maximum
5	0.16	0.16	0.52	0.52
55	0.52	0.54	1.71	1.77
83	0.64	0.66	2.10	2.17
211	1.06	1.09	3.48	3.58
250	1.15	1.20	3.77	3.94
300	1.26	1.31	4.13	4.30
350	1.36	1.43	4.46	4.69
400	1.47	1.53	4.82	5.02
450	1.56	1.63	5.12	5.35
500	1.65	1.73	5.41	5.67
550	1.75	1.82	5.74	5.97
600	1.83	1.91	6.00	6.27
750	2.04	2.16	6.69	7.09
865	2.20	2.34	7.22	7.68
1000	2.41	2.52	7.91	8.27



Setting a New Standard in Cable Technology!
A clean center conductor after coring is a feature of this product and should be considered normal.

Specifications are subject to change without notice.

For more information, call Customer Service at 800.982.1708 or 828.324.2200 • Fax 828.328.3400 • custserv@commscope.com



J-283X

BROADBAND LOG PERIODIC TEST ANTENNA MODEL:

- J-283X

TEST ANTENNA

This broadband VHF/UHF antenna features a log periodic biconical design with performance exceeding the physical size of the antenna. The compact design and **single UHF/VHF broadband feed point** makes it ideally suited for use as a standby antenna for CATV head ends.

SPECIFICATIONS:

ELECTRICAL

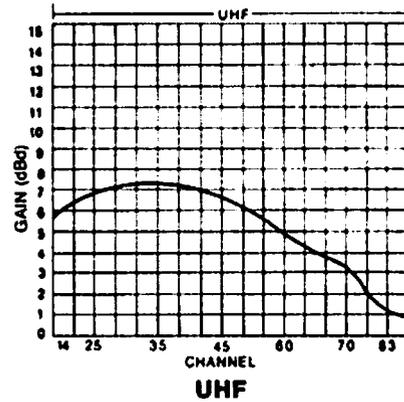
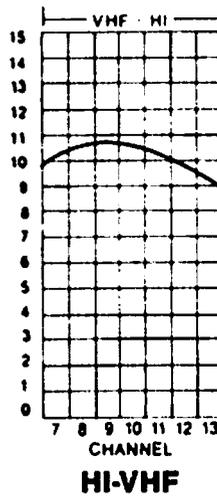
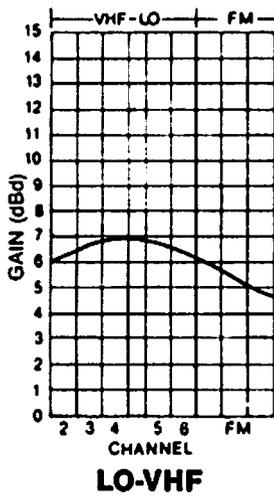
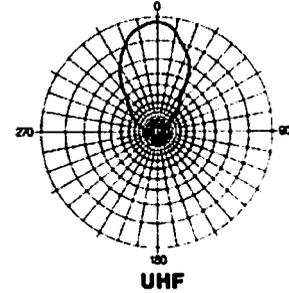
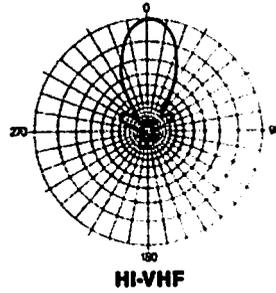
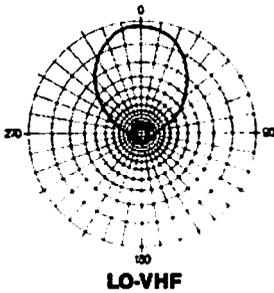
Specification	J-283X		
	LOW BAND	HIGH BAND	UHF BAND
FREQUENCY BAND			
GAIN *	7-9 dBi	11-13 dBi	5-9 dBi
IMPEDANCE	75 Ohm	75 Ohm	75 Ohm
VSWR	1.5:1	1.5:1	1.5:1
FR: BK RATIO	18 dB	18 dB	20 dB
POLARIZATION	Horiz.	Horiz.	Horiz.
H. BEAM WIDTH	70 deg.	45 deg.	55 deg.
CONNECTOR	"F" Connector		
CENTRE MOUNT	Standard		
PIPE SIZE	1.5" To 2.0" O.D.		

* SEE GAIN CURVES NEXT PAGE

A qualified structural engineer should be consulted prior to mounting an antenna on a tower or a support structure.

WADE Antenna Inc.
 29 Sharp Road
 Brantford, Ontario, N3T 5L8 Canada
 Tel: 519.756.7157
 Fax: 519.756.5056

(800) 463-1607
sales@wadeantenna.com
www.wadeantenna.com



Please Note: dBi = dBd + 2

SPECIFICATIONS:

WIND AND ICE LOADING

Specification	J-283X	Specification	J-283X
BOOM LENGTH	90.5 "	WIND LOAD (LBS):	
TURNING RADIUS	65 "	NO ICE*	3.4 Sq. Ft.
WEIGHT (LBS):	20	1" RADIAL ICE**	12.4 Sq. Ft.
WIND THRUST (LBS):		WIND TORQUE (Ft.-Lbs):	
NO ICE*	116.7	NO ICE*	215.6
1" RADIAL ICE**	111.9		

*WIND SPEED 100 MPH

**HALF WIND 50 MPH

WADE Antenna Inc.
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 Brantford, Ontario, N3T 5L8 Canada
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 sales@wadeantenna.com

www.wadeantenna.com

CERTIFICATE OF SERVICE

I, Michelle Brown Johnson, hereby certify that on this 14th day of December, 2012, I caused a copy of the foregoing "Petition for Special Relief" to be served via U.S. mail, postage prepaid, and email upon the following entity:

Gary Lutzker, Esq.
Dow Lohnes PLLC
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, DC 20036-6802


Michelle Brown Johnson