

TECHNICAL EXHIBIT
IN SUPPORT OF A
SPECIAL TEMPORARY AUTHORITY (STA)
FOR STATION WNYT-DT (FACILITY ID 73363)
TROY, NEW YORK
CH 18 10 KW

Technical Narrative

This Technical Exhibit supports a Special Temporary Authority (STA) for replacement (fill-in) low-power digital translator station WNYT-LD on channel 18 at Troy, New York. Station WNYT-LD is authorized to operate on channel 18 with a non-directional antenna effective radiated power (ERP) of 15 kilowatts (kW) and an antenna height above mean sea level (RCAMSL) of 512 meters (BDRTCDDT-20090629ACV).

This application requests a special temporary authority (STA) to permit WNYT-LD to operate at a reduced ERP and antenna height from its authorized parameters. Thus, no extension of the authorized coverage (contour) will occur.

Proposed STA Facilities

WNYT-LD will utilize an ERI, model AL80-18PL, non-directional antenna, with an ERP of 10 kW at an antenna RCAMSL of 491 meters. The proposed (NAD27) coordinates remain: 42-47-09 N, 73-37-43 W.

Radiofrequency Electromagnetic Field Exposure

The proposed digital facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The

radiation center for the antenna is located 201 meters above ground level. The proposed ERP is 10 kW. Based on a conservative downward relative field of 0.2 for an ERI AL80-18PL antenna, the calculated power density at a point 2 meters (6.6 feet) above ground level will not exceed 1% of the FCC's recommended limit of 0.33 mW/cm^2 for channel 18 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this is a multi-user site and agreement will control site access. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.



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WNYT-LD RF Transmission System Specifications

Description	System
Transmitter Power Output (2.5 kW):	4.0 dBk
Transmission Line Loss (47%) 1-5/8" rigid air (775 feet):	3.3 dB
ERI AL80-18PL (8.5 Power Gain):	9.3 dB
Effective Radiated Power (10 kW):	10 dBk

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1.	Channel Number: 18											
2.	Translator Input Channel No. : 12											
3.	Primary station proposed to be rebroadcast:											
	Facility Identifier	Call Sign	City	State	Channel							
	73363	WNYT	ALBANY	NY	12							
4.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 42 Minutes 47 Seconds 9 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 73 Minutes 37 Seconds 43 <input checked="" type="radio"/> West <input type="radio"/> East											
5.	Antenna Structure Registration Number: 1004249 <input type="checkbox"/> Not Applicable [Exhibit 10] <input type="checkbox"/> Notification filed with FAA											
6.	Antenna Location Site Elevation Above Mean Sea Level: 289.6 meters											
7.	Overall Tower Height Above Ground Level: 224.8 meters											
8.	Height of Radiation Center Above Ground Level: 201.4 meters											
9.	Maximum Effective Radiated Power (ERP): 10 kW											
10.	Transmitter Output Power: 2.5 kW											
11.	a. Transmitting Antenna: Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search. <input checked="" type="radio"/> Nondirectional <input type="radio"/> Directional "Off-the-shelf" <input type="radio"/> Directional composite Manufacturer ERI Model AL80-18PL b. Electrical Beam Tilt: 1.75 degrees <input type="checkbox"/> Not Applicable											
	c. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> N/A (Nondirectional or Directional "Off-the-shelf") Rotation (Degrees): <input type="checkbox"/> No Rotation											
	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
	0		10		20		30		40		50	
	60		70		80		90		100		110	
	120		130		140		150		160		170	
	180		190		200		210		220		230	
	240		250		260		270		280		290	
	300		310		320		330		340		350	
	Additional Azimuths											

[Relative Field Polar Plot](#)

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12.	Out-of-channel Emission Mask: <input type="radio"/> Simple <input checked="" type="radio"/> Stringent										
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CERTIFICATION

13.	Interference : The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030.										<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in
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14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance, an **Exhibit is required.**
- Yes No
See Explanation in [Exhibit 12]
- By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.
15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:
- The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.
 - Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
16. **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:
- Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
 - Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.
 - Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

PREPARERS CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JONATHAN N. EDWARDS	Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT	
Signature	Date 12/23/2009	
Mailing Address DU TREIL, LUNDIN & RACKLEY, INC. 201 FLETCHER AVENUE		
City SARASOTA	State or Country (if foreign address) FL	Zip Code 34237 -
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