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Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Earth Station Registration

1–8. Legal Name of	Applicant		
Name:	Columbia Power and Water System	Phone Number:	931–388–4833
DBA Name:		Fax Number:	931–388–5287
Street:	201 Pickens Ln	E-Mail:	doug.burgess@cpws.com
	OO BOX		
City:	Columbia	State:	TN
Country	y: USA	Zipcode:	38401 –
Attentio	on: Mr Doug Burgess		
Country	y: USA		

9–16. Name of Contact Representative

Name: Glenn Jernigan Phone Number: 931–375–7681

Company: Columbia Power and Water **Fax Number:**

System

Street: 201 Pickens Lane E–Mail: glenn.jernigan@cpws.com

City: Columbia State: TN

Country: USA Zipcode: 38401–

Attention: Glenn Jernigan Relationship: Engineer

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b. a. a. a. 1. Earth Station (N/A) a2. Space Station	b. b1. Application for License of New Station b2. Application for Registration of New Domestic Receive—Only Station (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) b6. Transfer of Control of License or Registration (N/A) b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite (N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States b10. Other (Please specify) b11. Application for Earth Station to Access a Non—U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States. b12. Application for Database Entry (N/A) b13. Amendment to a Pending Database Entry Application (N/A) b14. Modifiction of Database Entry		
17c. Is a fee submitted with this application? If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). Governmental Entity Noncommercial educational licensee Other(please explain):			
17d. Fee Classification BGV – Fixed Satellite V	SAT System		

18. If this filing is in reference to an existing station, enter: (a) Call sign of station: Not Applicable 19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: (b) File number of pending application: Not Applicable Not Applicable
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TYPE OF SERVICE				
20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:				
a. Fixed Satellite				
b. Mobile Satellite				
c. Radiodetermination Satellite				
d. Earth Exploration Satellite				
e. Direct to Home Fixed Satellite				
f. Digital Audio Radio Service				
g. Other (please specify)				
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.			
only one.	Using U.S. licensed satellites			
O Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites			
23. If applicant is providing INTERNATIONAL COMMON CARRIER sefacilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these			
O Connected to a Public Switched Network Not connected to	o a Public Switched Network			

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)
c.Other (Please specify upper and lower frequencies in MHz.)
Frequency Lower: 3700 Frequency Upper: 4200
TYPE OF STATION
25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
a. Fixed Earth Station
b. Temporary–Fixed Earth Station
c. 12/14 GHz VSAT Network
d. Mobile Earth Station
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)
26. TYPE OF EARTH STATION FACILITY: Choose only one.
Transmit/Receive Transmit—Only Receive—Only N/A
PURPOSE OF MODIFICATION
TORIOSE OF MODIFICATION
27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)
Not Applicable

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.	C	Yes	⊚ No	D.
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	utical e	n route	or	
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes	s ⊚ N	0	
30. Is the applicant an alien or the representative of an alien?	O Yes	6 6 N	o o N	J/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	s ⊚ N	о о ^N	J/A
32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O Yes	6 N	о о N	I/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one–fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O Yes ● N	To O N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.		
BASIC QUALIFICATIONS		
35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	○ Yes	No
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	○ Yes	No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	⊚ No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	O Yes	⊚ No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	O Yes	⊘ No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.	Yes	O No
42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.	O Yes	No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, coordinated or is in the process of coordinating the space station?n/a	what administ	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the not appear in this box, please go to the end of the form to view it in its entirety.)	complete desc	eription does
Receive only earth station that provides CATV for the residents in Maury Co	ounty TN 38	3401.

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	● A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	O B
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	o c

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

- Individual		se.)	
o Individual			
Unincorporated Association			
 Partnership 			
Corporation			
Governmental Entity			
Other (please specify)			
45. Name of Person Signing		46. Title of Person Signing	
45. Name of Person Signing Glenn Jernigan		46. Title of Person Signing Director of Broadband Services	
	ents.		
Glenn Jernigan	ents. Attachment 2:		
Glenn Jernigan 47. Please supply any need attachment		Director of Broadband Services	
Glenn Jernigan 47. Please supply any need attachment		Director of Broadband Services	
Glenn Jernigan 47. Please supply any need attachmed Attachment 1:	Attachment 2:	Director of Broadband Services Attachment 3:	NMENT
Glenn Jernigan 47. Please supply any need attachmed Attachment 1: WILLFUL FALSE STAT	Attachment 2: TEMENTS MADE ON THIS FO	Director of Broadband Services	

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier: 201 Pickens Ln. E5. Call Sign:

E2: Contact Name Brad Tebben E6. Phone 931–375–7682

Number:

E3. Street: Pickens Ln. E7. City: Columbia

E8. County: Maury

E4. State TN E9. Zip Code 38401

E10. Area of Operation: Columbia TN

E11. Latitude: 35 °35 '52.54 "N

E12. Longitude: 87 °2 '34.65 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 0.0 meters

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two–degree spacing policy.	● Ye	s O ^N	Го	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Ye	s O ^N	Ю	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Ye	es	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Ye	es	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yo	es	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	O Ye	es	•	No
POINTS OF COMMUNICATION				
Satellite Name:SES-11 (S2964) SES-11 104.95 W.L If you selected OTHER, please enter the following:				

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name: AMC-11(S2433) AMC-11 131 W.L. If you select	cted OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name:GALAXY 23 (S2592) GALAXY 23 121 W.L. If	you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name:GALAXY 17 (S2715) GALAXY 17 91 W.L. If y	ou selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name: AMC-18 (S2713) AMC-18 139 WL If you select	eted OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name:GALAXY 28 (S2160) GALAXY 28 89.0 W.L.	you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
	•
Satellite Name:GALAXY 13 (S2386) GALAXY 13 127 W.L. If	you selected OTHER, please enter the following:

ne following:
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ving:
the following:
e enter the following:
16

E21. Common Name:	E22. ITU Name:				
E23. Orbit Location:	E24. Country:				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country:USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country:USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier: 201 Pickens Ln.					
E26. Common Name:	E27. Country: USA				

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier: 201 Pickens Ln.								
E26. Common Nar	ne:			E27. Country: USA				
POINTS OF CO	OMMUNICATION ((Destination Points))					
E25. Site Identifier	: 201 Pickens Ln.							
E26. Common Nar	ne:			E27. Cou	ntry:USA			
POINTS OF COMMUNICATION (Destination Points)								
E25. Site Identifier: 201 Pickens Ln.								
E26. Common Nar	ne:			E27. Cou	ntry:USA			
POINTS OF CO	OMMUNICATION ((Destination Points))					
E25. Site Identifier: 201 Pickens Ln.								
E26. Common Nar	me:			E27. Country:USA				
POINTS OF CO	MMUNICATION ((Destination Points))	•				
E25. Site Identifier	: 201 Pickens Ln.							
E26. Common Nar	me:			E27. Country: USA				
POINTS OF CO	MMUNICATION ((Destination Points))	•				
E25. Site Identifier	: 201 Pickens Ln.							
E26. Common Nar	ne:			E27. Country: USA				
ANTENNA				•				
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufac	turer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)	
201 Pickens Ln.	Pickens Ln	1	ACTi		Simulsat 5	5.0	44.5 dBi at 3.95	

Id	Diameter	Ground	(meters)	Height Above Ground Level 	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Pickens Ln	5.2/9.6	6.0	223.0	0.0	0.0	0.0	0.0

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Pickens Ln	3700 4200	R	Linear and Circular	N/A	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

	FM
L	

FREQUENCY COORDINATION

E28	•	E51. Satellite	E52/53.	E54/55.	E56. Earth	E57.	E58. Earth	E59.	E60.
Ant	enna Id	Orbit Type	Frequency	Range of	Station	Antenna	Station	Antenna	Maximum
			Limits(MHz)	Satellite Arc	Azimuth	Elevation	Azimuth	Elevation	EIRP Density
				E/W Limit	Angle	Angle	Angle	Angle	toward the
					Eastern Limit	Eastern Limit	Western	Western	Horizon
							Limit	Limit	(dBW/4kHz)
							Limit	Limit	(dBW/4kH

Pickens Ln	Geostationary	3700 4200	89.0/ 135.0	122.84		36.0	186.78	20.0	-24.0	
REMOTE CC	REMOTE CONTROL POINT LOCATION									
E61. Call Si	ign				E65	. Phone Nun	nber			
	NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.									
E62. Street	Address									
E63. City			E67. County	у			E64/68.		E66. Zip Code	
							State/Countr	y		

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier: Reservior Hill E5. Call Sign:

E2: Contact Name Brad Tebben E6. Phone 931–375–7682

Number:

E3. Street: W 6th E7. City: Columbia

E8. County: Maury

E4. State TN E9. Zip Code 38401

E10. Area of Operation: Columbia TN

E11. Latitude: 35 °37 '4.793 "N

E12. Longitude: 87 °2 '42.65 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 256.0 meters

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two–degree spacing policy.	• ,	<i>l</i> es	O No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	0,	Yes	O No	⊚ N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	0	Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	0	Yes	•	No
POINTS OF COMMUNICATION				
Satellite Name: GALAXY 14 (S2385) GALAXY 14 125 W.L. If you selected OTHER, please enter the follo	wing:			

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)
Reservior Hill	Resevoir H	1	Patriot	PRT-38A2KP	3.0	44.5 dBi at 3.95

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Resevoir H	3.1/5.2	3.0	259.0	0.0	0.0	0.0	0.0

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Resevoir H	3700 4200	R	Linear and Circular	N/A	0.0	0.0

entirety.) FM	lation and Servic		plete description	n does not appear	in this box, plea	se go to the en	d of the for	m to vi	ew it in its
E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevatio Angle Western Limit	n	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Resevoir H	Geostationary	3700 4200	89.0/ 135.0	122.84	36.0	186.78	20.0		-24.0
REMOTE CO	ONTROL POIN	T LOCATION	•	•	!		!		
	ign ase enter the call nich this applicati				. Phone Number				
E62. Street	Address			1					
E63. City E67. County				у		E64/68. State/Country		E66	. Zip Code

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25-24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.