From: George Varkey
To: Jae Lim
Subject: RE: SES-MOD-20181008-03661; Call Sign: E070182
Date: Tuesday, January 21, 2020 11:40:57 AM
Attachments: image002.png

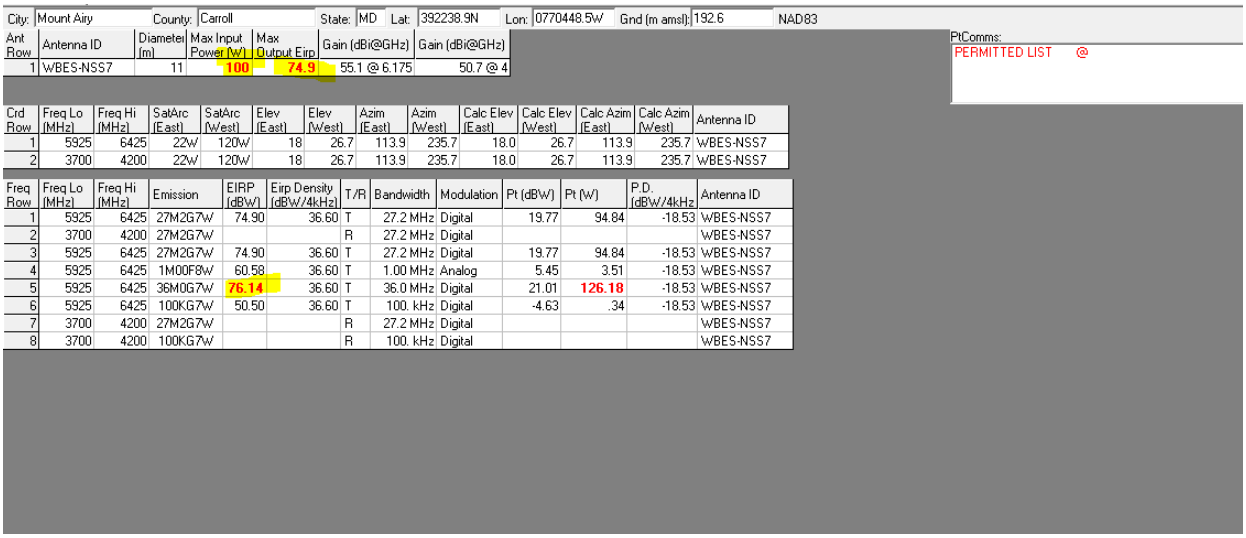
Hi Jae Lim,
Thank you for looking into this and giving the feedback. Regarding the higher EIRP of the 36 MHZ carrier, I would correct it as 75.13 dBW considering 100W power at the antenna feed with 55.13dB gain of the antenna. (I would like to lower the EIRP of the 36MHz carrier to 75.13dBW from 76.14dBW as given in the requested application)
Kindly let me know if you need additional information from me.
Thanks,

George Varkey
4 Research Way • Princeton • New Jersey
Tel +1 609 987 4327 • Mobile +1 609 480 0019

From: Jae Lim <Jae.Lim@fcc.gov>
Sent: Tuesday, January 21, 2020 10:52 AM
To: George Varkey <George.Varkey@ses.com>
Subject: RE: SES-MOD-20181008-03661; Call Sign: E070182

Hi George Varkey,

I updated your application and agree with not needing the Freq Coord Report.
However EIRP 76.14 dBW @36M0G7W 5925-6425MHz is still too high even with higher antenna gain@ 55.13 dBi.
Please provide lower EIRP.



City: Mount Airy | County: Carroll | State: MD | Lat: 392238.9N | Lon: 0770448.5W | Gnd (m amsl): 192.6 | NAD83

PtComms: PERMITTED LIST @

Ant Row	Antenna ID	Diameter (m)	Max Input Power (W)	Max Output Eirp	Gain (dBi@GHz)	Gain (dBi@GHz)
1	WBES-NSS7	11	100	74.9	55.1 @ 6.175	50.7 @ 4

Crd Row	Freq Lo (MHz)	Freq Hi (MHz)	SatArc (East)	SatArc (West)	Elev (East)	Elev (West)	Azim (East)	Azim (West)	Calc Elev (East)	Calc Elev (West)	Calc Azim (East)	Calc Azim (West)	Antenna ID
1	5925	6425	22W	120W	18	26.7	113.9	235.7	18.0	26.7	113.9	235.7	WBES-NSS7
2	3700	4200	22W	120W	18	26.7	113.9	235.7	18.0	26.7	113.9	235.7	WBES-NSS7

Freq Row	Freq Lo (MHz)	Freq Hi (MHz)	Emission	EIRP (dBW)	Eirp Density (dBW/4kHz)	T/R	Bandwidth	Modulation	Pt (dBW)	Pt (W)	P.D. (dBW/4kHz	Antenna ID
1	5925	6425	27M2G7W	74.90	36.60	T	27.2 MHz	Digital	19.77	94.84	-18.53	WBES-NSS7
2	3700	4200	27M2G7W			R	27.2 MHz	Digital				WBES-NSS7
3	5925	6425	27M2G7W	74.90	36.60	T	27.2 MHz	Digital	19.77	94.84	-18.53	WBES-NSS7
4	5925	6425	1M00F8W	60.58	36.60	T	1.00 MHz	Analog	5.45	3.51	-18.53	WBES-NSS7
5	5925	6425	36M0G7W	76.14	36.60	T	36.0 MHz	Digital	21.01	126.18	-18.53	WBES-NSS7
6	5925	6425	100KG7W	50.50	36.60	T	100. kHz	Digital	-4.63	.34	-18.53	WBES-NSS7
7	3700	4200	27M2G7W			R	27.2 MHz	Digital				WBES-NSS7
8	3700	4200	100KG7W			R	100. kHz	Digital				WBES-NSS7

Jae Lim
FCC/IB
1-202-418-2899

From: George Varkey <George.Varkey@ses.com>
Sent: Friday, January 17, 2020 10:36 AM
To: Jae Lim <Jae.Lim@fcc.gov>
Subject: RE: SES-MOD-20181008-03661; Call Sign: E070182

Thanks, we can discuss it over phone if needed.

Have a good weekend!
Best regards,

George Varkey
4 Research Way • Princeton • New Jersey
Tel +1 609 987 4327 • Mobile +1 609 480 0019

From: Jae Lim <Jae.Lim@fcc.gov>
Sent: Friday, January 17, 2020 9:41 AM
To: George Varkey <George.Varkey@ses.com>
Subject: RE: SES-MOD-20181008-03661; Call Sign: E070182

Good morning George,
Thanks for getting back to me so quickly.
Please allow me some time to verify your data and I'll get back to you next week if there is any additional information I need.
Thanks.

Jae Lim
FCC/IB
1-202-418-2899

From: George Varkey <George.Varkey@ses.com>

Sent: Thursday, January 16, 2020 2:22 PM
To: Jae Lim <Jae.Lim@fcc.gov>
Subject: RE: SES-MOD-20181008-03661; Call Sign: E070182

Hi Jae,
Thank you for sharing the anomalies in the license modification application. I need some help from you in order to make corrections in the application.
See below my responses:

George Varkey
4 Research Way • Princeton • New Jersey
Tel +1 609 987 4327 • Mobile +1 609 480 0019

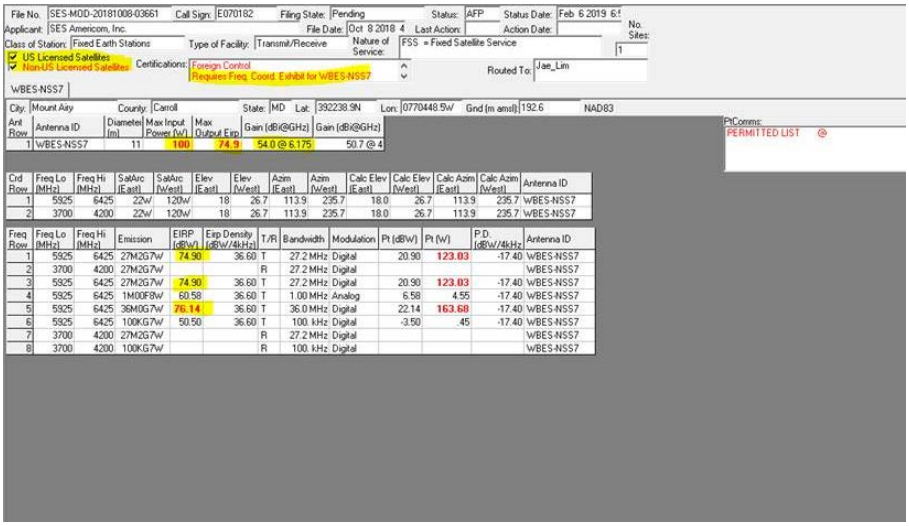
From: Jae Lim <Jae.Lim@fcc.gov>
Sent: Wednesday, January 15, 2020 10:58 AM
To: George Varkey <George.Varkey@ses.com>
Subject: SES-MOD-20181008-03661; Call Sign: E070182

Hi George Varkey,

1. Please provide Frequency Coordination Exhibit for your MOD.
   Does it require a new coordination report as far as the EIRP density of new carrier designations are same or lower?
2. You are using the Permitted List and please confirm you are only using the US licensed Satellites
   Yes, the satellites given in the permitted list only be used to provide service out of the station.
3. Please consider revising Tx EIRP, Input Power, Output EIRP, and/or Antenna Gain. Either Tx EIRP is too high, Input power is too low, Output EIRP is too low, and/or Antenna Gain is too high. Please check and verify all numbers.
   It has been noticed that the Tx antenna gain provided in the license application was not correct which is 55.13 dB instead of 54 dB given in the application. We would prefer to maintain the EIRP density of the carriers same as that of the original license and correct the EIRP of new carriers reflecting the changes in the antenna gain.
   In summary:
   Power at the antenna flange remain the same (100W)
   EIRP & EIRP density of the carriers will be same or lower with reference to the original license
   The EIRP of the newly added carriers will be modified reflecting the antenna gain and power at flange .

4. You answered "NA" for foreign control and I will check "NO" for foreign control.
   Yes, this shall be corrected in the application

   I would appreciate your recommendations in order to accomplish the mentioned correction.



Thanks.

Jae Lim
FCC/IB
1-202-418-2899