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March 10, 2000

VIA HAND DELIVERY

Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: ***Ex Parte Submission of Northpoint Technology, Ltd.***
ET Docket No. 98-206, RM-9147, RM-9245

Dear Ms. Salas:

In accordance with Section 1.1206 of the Commission's rules (47 CFR § 1.1206), this letter is written to notify you that on Thursday, March 9, 2000, Sophia Collier and Chula Reynolds of Northpoint Technology, Ltd. and I met with Adam Krinsky of Commissioner Gloria Tristani's office. The issues discussed are summarized in the documents attached hereto. In addition, we discussed the Northpoint/NGSO sharing proposals set forth in Northpoint filings.

An original and six copies of this letter and attachments are submitted for inclusion in the public record for the above-captioned proceedings. Please direct any questions concerning this submission to the undersigned.

Sincerely,



Antoinette Cook Bush
Counsel for Northpoint Technology, Ltd.

cc: A. Krinsky

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DirecTV Rain Testing

- DirecTV asserted the following:
 - Testing conditions
 - DirecTV found “harmful interference” at Ericsson Memorial (p. 25)
 - A simulation was setup to replicate this site in rain
 - One set top box was subjected to injected noise of a “similar interference level” as that of DirecTV’s Ericsson Memorial site (p. 25)
 - A second “identical” control set top box was used without noise (p. 22)
 - Assumptions:
 - Interference can be scored by using the antenna pointing aid known as a signal “meter” which is built into the set top box
 - The set top box loses video when the signal meter reads “34”

Was There Harmful Interference at Ericsson Memorial?

- The FCC Compliance and Information Bureau Report says “No”
 - DirecTV claimed to have found a 8 tick depression for Echostar 61.5
 - FCC CIB investigation of the site found a 1.18 tick change and “no harmful interference”
 - DirecTV, itself, admits the Ericsson data is higher than the signal meter readings predicted by it own propagation model (p. 49)
 - One possible explanation:
 - DirecTV use of a shield to simulate Northpoint “Off” was a flawed method that exaggerated “interference”

Did DirecTV Replicate What It Claimed to Have Found at Ericsson?

- DirecTV claims that it used a “similar level of interference” as that which it says it found at the Ericsson site (p. 25)

| Data item | Ericsson | New York Rain Test | Difference |
|---------------------|----------|--------------------|------------|
| Signal meter change | 8 ticks | 12 – 14 ticks | 4-6 ticks |
| C/I ratio | 16 dB | 13.7 dB | 2.3 dB |

Data from pages 25 - 27

- As shown by DirecTV report data reproduced above, DirecTV injected almost twice the noise as the “interference” it claimed to have found at Ericsson – therefore it did not replicate the Ericsson site at all.

Were the Set Top Boxes Actually Identical?

- DirecTV says the set top boxes were identical but Figure 3.4.1-2 of the report clearly shows they are not.
 - IRD2 – the set top box which was supposed to replicate “interference” clearly operated on a different scale and was weaker than IRD1
 - The signal meter of IRD2 displayed significantly lower values at higher C/N ratios than IRD1 (p. 23)
 - Example: At the C/N when IRD1 would have displayed “42,” IRD2 would have displayed “34”
 - Even though the experiment was set up to show a relative difference between two “identical” receivers DirecTV used mismatched receivers and made no attempt to correct for this known difference

Was a Signal Meter Value of 34 Accurate as the Video Threshold?

- DirecTV did not use actual video observation as the measure of outage, it assumed outage at 34 for both boxes without confirmation. DirecTV can not support their assertion that video was lost at any specific signal meter value – therefore it is not known whether video was present or absent at signal meter value 34 for IRD2
- Previous DirecTV materials have asserted that the video threshold is 28 ticks – not 34 ticks (DirecTV FCC Presentation - July 21, 1999)
- *It is known* from the DirecTV calibration table that IRD1 and IRD2 used different signal meter scales and that IRD2 displayed lower values at higher C/N values –
 - According to the DirecTV's calibration table when IRD1 displays "42," IRD2 - receiving the same signal - would display "34" (p. 23)
 - Therefore, it is likely IRD1 and IRD2 display different readings for the signal meter at the video threshold

More Questions About DirecTV's Rain Test

- Why did DirecTV use consumer set top boxes instead of precision test equipment as the sole measurement devices to perform its tests?
- Why did DirecTV not gather control data with a spectrum analyzer to accurately quantify the amount of signal present and amount noise injected to insure that the test actually replicated what DirecTV intended?
- In the absence of a measured signal for DirecTV why does DirecTV not present a link budget to quantify a theoretical signal level for the New York location?
- Why does DirecTV not present any weather data for the October 4 rain event so as the rain rate could be compared to the ITU or Crane rain model?

Response to DirecTV

Northpoint Impact on DirecTV Unavailability

DirecTV Unavailability Claims in Summary:

- “The highest level of interference recorded by DirecTV was found at site 5...[where] DirecTV recorded a change in signal meter reading of 3 counts...equat[ing] to a 15% or higher degradation in unavailability.” (p. 41)
- “The calculated availability for this Washington, D.C. link is 99.9399%. When measured interference is included, this link availability is reduced to 99.9307%, which results in a 15.4% unavailability for the DirecTV service.” (p. 38)

Spring Creek 10/4/99

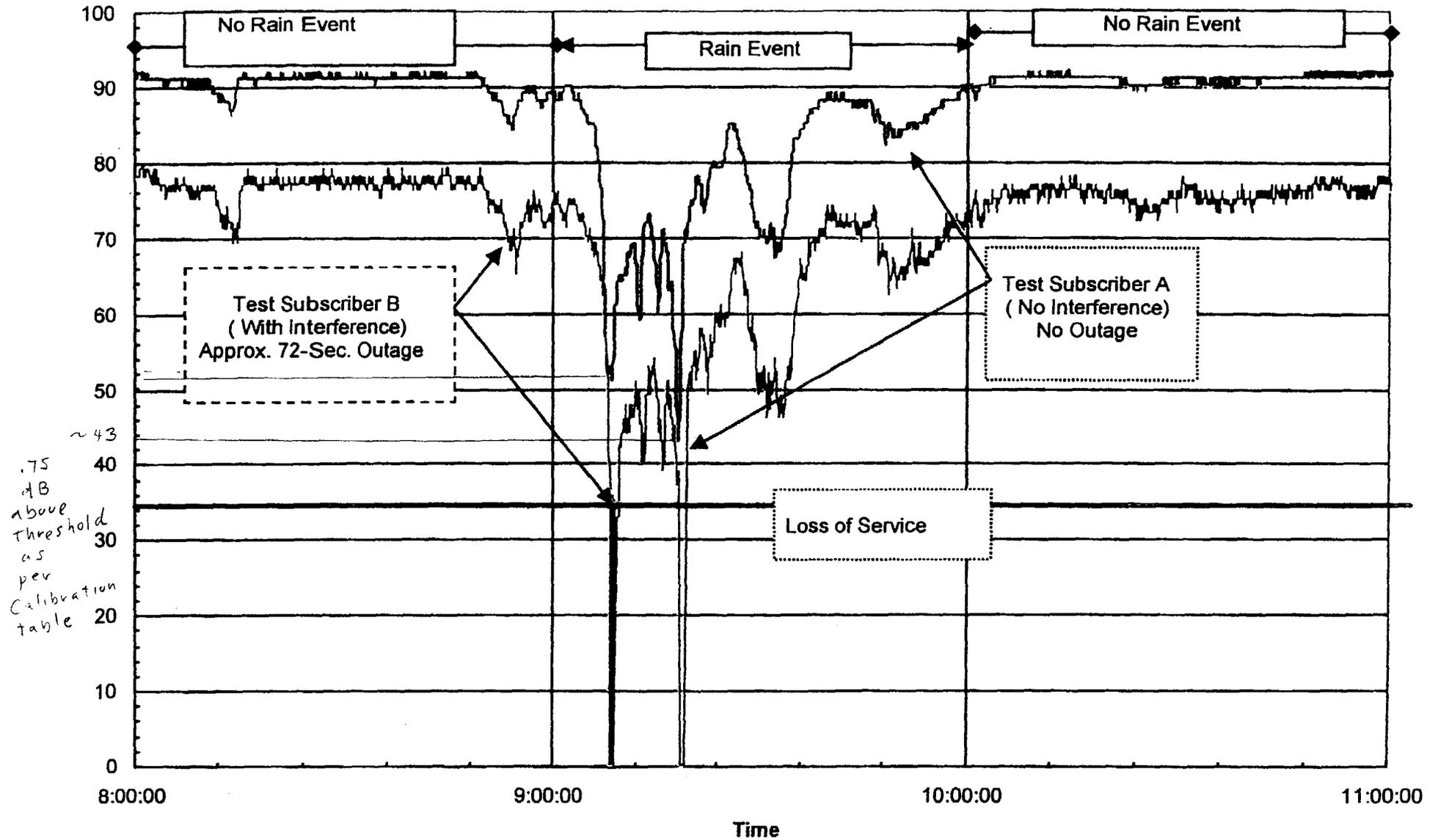


Figure 3.4.1.2-1: New York Rain Event, October 4, 1999

DIRECTV Receiver Calibration Curves (NY)

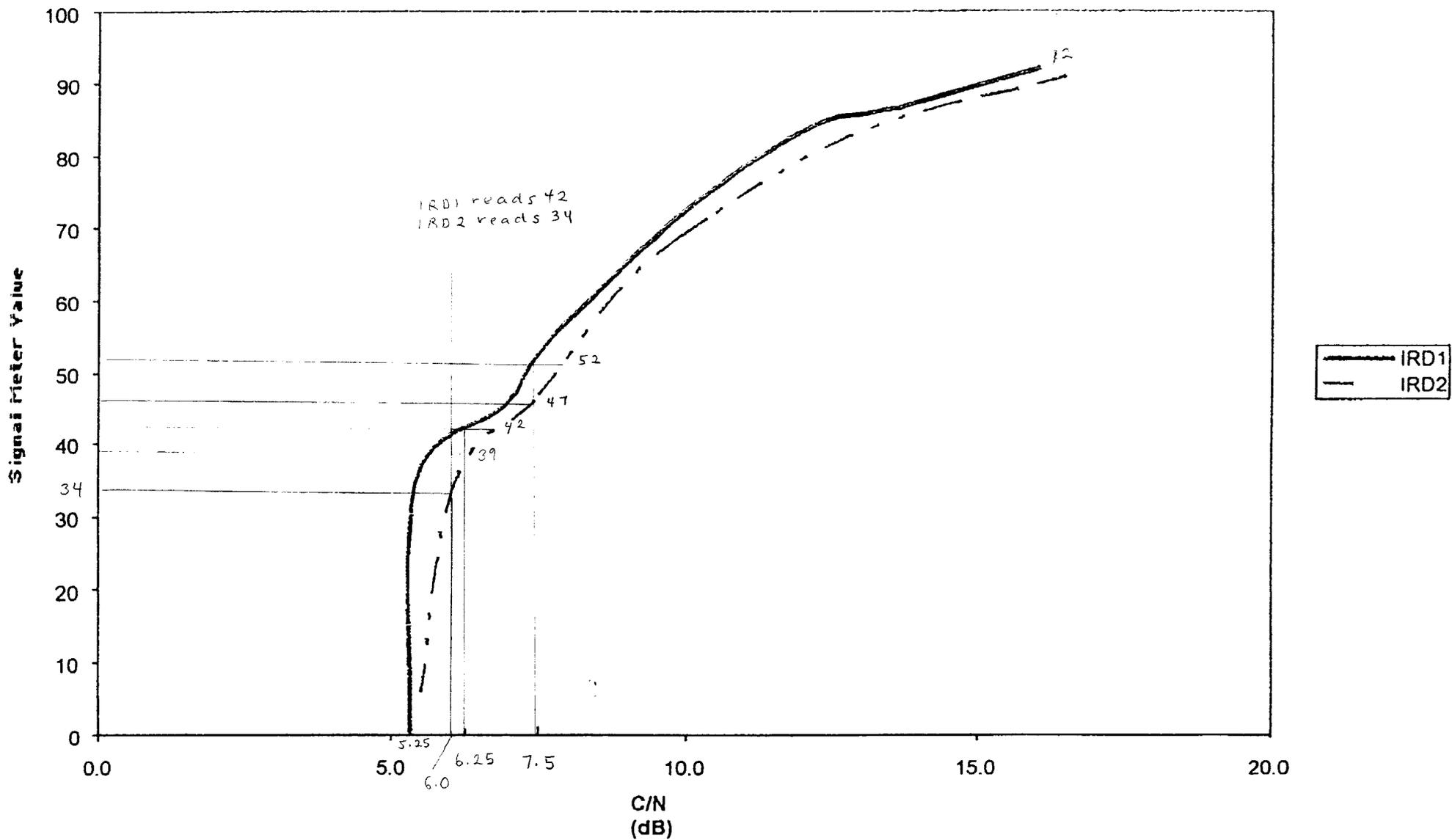


Figure 3.4.1-2 DBS receiver Calibration Curves (Spring Creek, NY)