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## **New Directional Directions**

### **FCC looks to clarify, reduce directional AM obligations**

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The FCC has requested comments on a proposal to let some, but not necessarily all, AM directional applicants use moment method computer modeling to demonstrate that their directional antennas perform as authorized.

The proposal was advanced by a coalition of broadcast engineering maven – broadcasters, manufacturers, consulting engineers – in early May, following several months of meetings and deliberations. The idea is to reduce the burden, both on AM applicants and on the Commission’s processing staff, by eliminating the need to conduct and analyze field strength measurements of directional arrays in order to verify that they’re working like they’re supposed to.

Historically, the Commission has required directional AM applicants to undertake elaborate, labor-intensive measurements to confirm that their arrays were working properly. Those measurements were then sent to the Commission, where staff members reviewed them as well.

But moment method computer programs (also referred to as NEC, or Numerical Electromagnetics Code, programs) permit the accurate calculation of actual performance based on certain internal antenna parameters, such as current and phase. The coalition also came up with draft rules which would permit the use of moment method modeling to assess the effect of nearby reradiators on the resulting pattern.

The coalition’s proposal, which is supported by 20 group owners and 10 consulting firms, has been submitted to the Commission in connection with its long-running inquiry in AM directional antennas (MM Docket No. 93-177). While not all AM applicants would be eligible to use the proposed modeling approach, it appears that that approach would still save considerable time and effort throughout the industry.

Comments on the coalition’s proposal are due by July 23, 2007; reply comments are due by August 22, 2007.

Meanwhile, also on the directional AM front, the Commission has amended its rules to clarify the circumstances, and time frames, in which a directional AM station must act when it runs into problems with operation of its antenna system. Two rules – Sections 73.62 and 73.1350 – govern such situations, but they have historically provided conflicting directions. Now that has been straightened out. Under the new versions, Section 73.62 requires an AM licensee to identify and address directional antenna problems within **27 hours** when those problems result in operating parameters in excess of  $\pm 15\%$  sample current ratio or  $\pm 3^\circ$  phase tolerances required by the rules, or when any monitoring point field strength exceeds 125% of the licensed limit, or when the operation at variance results in interference complaints. And Section 73.1350, which requires a scanty **three-minute** response time, will now kick in when the operation at variance poses a threat to life or property or is likely to significantly disrupt the operation of other stations. Variant operations not covered by Section 73.62 or the three-minute provision of 73.1350 must be addressed within three hours. Of course, if you run into any problem which might trigger any of these provisions, you should consider contacting your consulting engineer or the FHH attorney with whom you normally work to determine how best to deal with the situation.