CURRENT UPGRADE RECOMMENDATIONS REGARDING
LICENSED FULL SERVICE AM AND FM STATIONS
OCTOBER 2012

FM STATION OPTIONS

At present (and for the foreseeable future) there will not be a filing window for new full service NCE FM facilities in the reserved band. However, the FCC is periodically opening filing opportunities for new NCE and commercial FM stations in the non reserved portion of the band. That said, there are some avenues for existing facility improvements, or upgrades, which can be explored at this time.

The easiest, given the relatively recent DTV transition, is that the prior TV 6 protection requirements which have previously hamstrung many full service NCE stations are no longer an issue for a number of these facilities. Thus, a previously non viable power increase or site change may now be possible. An example of such an upgrade is a CP granted to KCSS, Turlock, CA, based on engineering undertaken by Communications Technologies, Inc., increasing the ERP of the station from the prior 400 watt vertical only to 6,000 watt circular polarization. This modification resulted in an increase of nearly 150% of population within the station’s protected 60 dBu coverage contour. Other than a power increase or site change on the existing frequency, an adjacent (minor) channel change can also be explored for possible additional improvement potential.

Additionally, there are still a number of grandfathered Class A, 3 kW facilities in the commercial band (regulated under Section 73.213 of the FCC Rules) that may be able to take advantage of a mutual upgrade with another involved 73.213 station if such a mutual upgrade can be determined to be “in the public interest.” In the absence of an agreement between these grandfathered Class A facilities, it is still possible to effectuate a site change that may be beneficial to one station if the proposed unilateral station modification remains the equivalent of a Class A, 3 kW facility in the direction of the other involved grandfathered station. These allocation studies are typically fairly complicated involving a number of variables, but if engineered carefully, can afford these stations a worthwhile upgrade from both an FCC theoretical and real world coverage standpoint.

Other existing upgrade possibilities include a review of your station’s prior and current allocation picture, which can include an in depth frequency study of the station’s minor change channels (i.e., those channels +/- 3 channels above and below the station’s current channel as well as the two intermediary frequencies). From this study, a determination can be made of the maximum ERP possible on any given frequency from the existing transmitter site. Should the allocation study
show that an upgrade on the current frequency, and/or at the existing site location is not feasible, possible alternatives can then be studied.

If your station can afford it, consider allowing your engineering consultant to perform a study which may permit moving a limiting co or adjacent channel facility to an alternate frequency. If viable, this change may allow the station to upgrade at its licensed site location. Finally, a transmitter site change for your station, if the College or University will consider it, possibly in conjunction with a community of license ("COL") change, could significantly enhance coverage potential if the allocation situation is improved at the new location and the site is well chosen.

On October 12, 2012 the Commission issued its Second Order on Reconsideration of The Rural Radio Order in MB Docket 09-52. The Second Order clarifies the showings required by applicants who wish to change their community of license. If a COL change may be desired and could significantly improve your station’s coverage, you would need to retain the services of your FCC attorney and consulting engineer in order to fully evaluate the potential and viability of such a facility modification.

Additionally, the Commission has granted waiver requests in specific circumstances involving 2nd and 3rd adjacent channel overlap of existing facilities where grant of the waiver would “increase the flexibility available to non commercial stations to make significant improvements in service.” It is noted that the Commission believes that under certain allocation scenarios it may be acceptable to permit some small amount of prohibited overlap to, or from, an adjacent channel station where the potential service gains warrant this consideration. While the outcome of this avenue is not assured, it may be worthwhile exploring if there are no alternative upgrade options available.
Another potentially helpful (and relatively easily implemented) facility improvement relates to a modification in the technical rules in December, 2000, which changed the interfering contour for second adjacent channel relationships from the prior 80 dBu to the less restrictive 100 dBu interfering contour for full service non commercial facilities. In additional to providing a common interference prediction standard between the commercial and non commercial FM services, the adoption of this less preclusive standard created opportunities for NCE FM (and FM translator) stations to potentially increase power and coverage as well as provide them with greater site selection flexibility. Should your station fall into this category, this could be a very cost effective way to enhance the station’s coverage area.

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**AM STATION OPTION**

A final facility coverage improvement possibility relates to AM stations, which are now permitted to utilize an FM translator to enhance coverage within the AM station’s 2mV/m coverage contour. There are some restrictions on how this improvement may be implemented (among these restrictions, the translator’s 60 dBu coverage contour must be encompassed by the AM station’s 2mV/m contour, not extend beyond a 25 mile radius of the AM station’s transmitter site and operate with a maximum ERP of 250 watts), but a good number of AM stations have been able to employ this improvement option. Again, a full evaluation of the potential improvement by your consulting engineer is the first step should this be an avenue your station may wish to consider.

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