On Jan. 1, 2013 the FCC's new narrowband frequency requirements go into effect. These regulations require old wideband radio frequencies (25 kHz wide channels) be reduced to 12.5 kHz). This applies to all UHF and VHF frequencies between 150-512 MHz (VHF) and 150-174 MHz (VHF). It also affects any repeaters you might have on your communication system. Lastly, it applies to SCADA systems, so if your system incorporates SCADA communication technology you will need to update that, as well. This is not new news as the FCC announced the requirement back in 1999, but as time gets closer you need to make sure you are compliant as radios are a big part of many golf courses irrigation systems communications.

You have probably already dealt with the narrowband frequency issue with your crew's radios, but did you look at the irrigation radios? Unfortunately, many superintendents during this process have discovered they have no FCC license for their radios. Remember UHF and VHF radios require a FCC license to operate. If your system is a 900 MHz system, then no license is required. So if you have no license, then it's time to get one and this can be expensive.

An alternative is to change your technology. Download a free app for your existing or to-be-purchased iPad and use that as your remote control system instead of the radio. It is much less expensive than the license (updated or new) and new radios, not to mention a lot more fun. You can also change your system to 900 MHz radios which doesn't require a license.

If your system uses radio communication for central to field controller communication, and it is still wideband, than you've got lots more to do and your costs will be substantially higher as narrowband equipment is more expensive. You may have to upgrade your control system hardware. By now your local irrigation distributor should have been in contact with you and you should have a plan in place for upgrading before the year is out. Many manufacturers have special pricing available for upgrades, especially if you are a member of their service plans, such as Rain Bird's GSP or Toro's NSN.

The FCC has stated it will not extend the deadline and the fines for non-compliance are pretty hefty, upwards of $25,000.00 for unauthorized or illegal operation. They will also cancel your license and the FCC has stated relicensing of cancelled systems will become very difficult. You cannot mix wideband and narrowband. You have to be one or the other and starting January 1 it has to be narrowband.

Depending on your system, your pump station monitoring package and communication or your weather station communication with your central computer could also utilize radio communication and those frequencies need to be checked and possibly upgraded.

This change in frequencies is an important issue. It is not something that can be changed overnight and requires time, planning and cash. And in this day and age, all of those are at a premium. GCI

Brian Vinchesi, the 2009 EPA WaterSense Irrigation Partner of the Year, is president of Irrigation Consulting Inc., a golf course irrigation design and consulting firm headquartered in Pepperell, Mass., that designs irrigation systems throughout the world. He can be reached at bvinchesi@irrigationconsulting.com or 978/433-8972.