Increasing HD Power Requires Additional Testing

- **NPR and its Member stations support an HD power increase, but a blanket 10 dB increase is likely to harm existing analog services, including radio reading services for the print impaired**

  - NPR Labs testing demonstrated a significant likelihood of interference within the protected analog service areas of stations with nearby high-power 1st adjacent HD stations. The comprehensive testing utilized widely-recognized procedures fully documented in the reports, generated numerous verifiable map studies to demonstrate the impact on the listener population, and no one has raised any specific technical issues with the testing.
  - To protect the integrity of the FM spectrum, the Commission must assume that stations authorized to increase power will increase power.
  - Even if the cumulative harm is not immediate, interference to analog service will occur wherever a station's nearby 1st adjacent neighbor increases power. For an individual station such as WBUR-FM, Boston, MA, a single first adjacent station could cause harmful interference to more than 400,000 people within WBUR's protected coverage area.
  - The study relied on by the power increase proponents is flawed: it lacks information on the actual signal strengths at test sites, the levels of pre-existing noise or interference, the impact on SCA subcarrier services (such as radio reading services), analog host compatibility with increased HD power, or mobile interference reception, and the study extrapolates from a limited number of test stations to the entire United States.

- **CPB has awarded NPR Labs an additional grant to study a more graduated approach to increasing HD power without causing analog interference**

  - The testing is ongoing and is scheduled to be completed in time to present the results with recommendations for regulatory implementation by early September.
  - If only a limited number of stations would implement a 10 dB power increase in the next few years, as proponents of the blanket increase predict, the Commission can prudently defer authorizing an increase by a few months.

- **A bifurcated approach to increasing HD power -- based on whether a station uses reserved or non-reserved spectrum -- is not a rational solution**

  - Although different methods are used to determine separation between potentially-interfering stations in the reserved and non-reserved portions of the FM band, the same RF protection ratios are employed in both portions of the band.
  - If anything, NPR Labs' technical analysis of stations on reserved and non-reserved channels showed a slightly higher incidence of interference to first-adjacent FM stations from high-power IBOC stations on non-reserved channels. The higher incidence of potential IBOC interference suggests that the FCC's allocation system for non-reserved band channels has produced slightly more efficient 'packing' of first-adjacent neighbors than in the reserved band.
  - NCE stations operate throughout the FM band. There are 360 licensed full power NCE stations operating on non-reserved spectrum, of which 71 are NPR Members or otherwise affiliates. These stations would be vulnerable to interference from 1st adjacent stations that increased power.
  - The Commission should not excuse non-reserved FM stations from providing a quality signal throughout their protected service areas.