SPECTRUM
FOR THE FUTURE

Raising CBRS Power Limits Could Have Catastrophic Impacts

Independent Technical Analysis Documents Real-World Impacts Across Critical Use Cases

The FCC is considering changes to CBRS power limits that could affect more than 1,000 wireless network operators and 430,000 base stations across virtually every sector of the American economy — from hospitals and factories to airports and farms. **CBRS can support such a massive and diverse ecosystem of operators because of its carefully calibrated power limits.**

In its March 2026 study entitled "Negative Impacts of Higher-Power Operation on the Citizens Broadband Radio Service," **Valo Analytica analyzes how increasing power levels could disrupt critical operations supported by CBRS.** In three case studies — an international airport, a major manufacturer, and a rural broadband provider — **higher power levels were shown to significantly undermine network operations, business plans and investments, and the innovation that the CBRS band was carefully designed to foster.** These case studies are a preview of the devastating impacts that more than 1,000 CBRS networks would experience if the power levels and technical requirements of CBRS are altered.

The Innovation Band: Why This Happens

CBRS earned its reputation as the "Innovation Band" because it lets **thousands of users share spectrum without getting in each other's way.** A key component that makes sharing work is low power levels. Turn up the power and the interference spreads — fewer users can coexist, existing networks lose access to spectrum, and most users simply can't operate in the band. **A significant increase in power doesn't just affect one user. It has cascading effects and triggers an outsized collapse that affects everyone sharing the band.**

The Valo Analytica study helps to bring the impact of higher power levels into sharp focus by examining what higher power would do to three real-world deployments of CBRS. The overall findings of the study are clear: **the successful and growing CBRS ecosystem as we know it today would disappear, as higher power limits favoring a select few will overpower and undermine existing operators' ability to reliably use the band.**

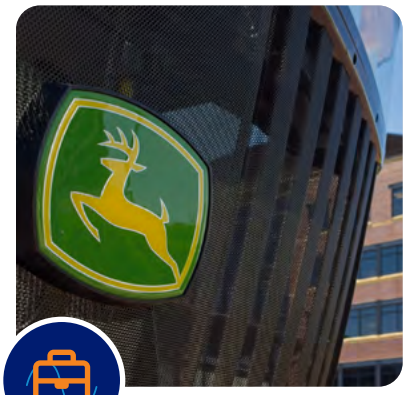
The Takeaway: The FCC should preserve the current power framework and avoid undermining the investments and innovation enabled by CBRS's successful spectrum sharing model.

What's at Stake: Big Picture Impact

- If fewer than 2% of CBRS base stations are converted to high power, there would be a **loss of over 65,000 channels and a massive loss of data throughput across the CBRS ecosystem** — data loss that would slow network operation to a crawl.
- Each high-power device deployed in the band would preempt shared use across as many as **thousands of square kilometers, undermining the availability of spectrum** upon which 96% of existing CBRS operations rely.
- Higher-power levels will overwhelm existing operations in a manner that neither the existing technology nor current FCC rules are equipped to manage. As a result, CBRS license holders will **face catastrophic service degradation** on the channels they paid to secure at auction.
- Negative impacts of higher power would be felt all across CBRS networks, including those used in **Education, Agriculture, Communications, Healthcare, Hospitality, Manufacturing and Transportation.**

What's at Stake: Real World Impacts

Manufacturing: Disrupted Automation and Lost Productivity



Case Study #1: John Deere

Interference from a nearby high-power device would disrupt robotics and real-time automation and render John Deere's factory facility unusable, as well as slash the coverage range of its Illinois office deployment to only 4–10 meters — roughly the reach of a set of wireless earbuds.

Airports: Safety, Security, and Operations at Risk

Case Study #2: Miami International Airport

A single higher-power deployment would instantly cut one-third of Miami International Airport's network capacity — with no regulatory remedy — jeopardizing security, runway safety monitoring, and public safety communications.

Rural Broadband: Less Reliable Internet for Rural Communities

Case Study #3: Amplex Internet

Damage from high-power operations is not hypothetical. Today, cross-border high-power operations from Canada are already disrupting internet services for broadband provider Amplex's customers in certain areas of its network. Allowing CBRS high-power operations throughout the U.S. would only compound the problem for Amplex and jeopardize network reliability for all CBRS users.