6 GHZ & REGULATORY

Geofenced Variable Power, and Why It Is Still Paper

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In January 2026 the FCC authorized a fourth class of unlicensed 6 GHz device, Geofenced Variable Power (GVP), and the client rule inside it says the client's ceiling sits 6 dB below the access point's authorized power, not the power the AP happens to be sending right now.

That is the same design law I keep coming back to: plan to the client, and plan to what the AP is permitted to do, never to what it is doing this second.

GVP is rules on paper. The order took effect April 27, 2026, but no geofencing system has been approved, and no GVP access point or client has been certified or shipped.

Parts 1 through 3 covered PSD, the 6 dB client backoff in LPI and SP, and how those two methods reach the same 6 dB by different techniques. GVP is the cleanest sequel, because the FCC used the same relative rule again.

The numbers GVP is authorized in U-NII-5 (5.925 to 6.425 GHz) and U-NII-7 (6.525 to 6.875 GHz), the same two sub-bands as Standard Power.

The GVP access point may transmit up to 24 dBm EIRP and 11 dBm/MHz PSD. The GVP client may transmit up to 18 dBm EIRP and 5 dBm/MHz PSD, with its ceiling pinned 6 dB below its access point's authorized power.

The one line to memorize Here is where the FCC pre-empted the mistake nearly everyone makes. The client's ceiling is 6 dB below the AP's maximum permitted power, not 6 dB below what the AP is transmitting. The order says it plainly: when a GVP access point runs below its maximum, the client's limit is still figured from the maximum permitted level, not from the reduced transmit level.

When geofencing caps the access point below its maximum inside an exclusion zone, the permitted ceiling itself drops, and the client tracks 6 dB below that reduced permitted level.

Cap the AP at 14 dBm and the client is held to 8 dBm.

What "geofenced" actually means This is the part that makes GVP a fourth class and not a flavor of the other three. A GVP access point has to know where it is and be told what it may do there.

It carries built-in geolocation to find its own coordinates.

Before it transmits, it registers with and is authorized by a geofencing system. It refreshes that frequency information at least once per day.

The difference is that AFC assumes a fixed, registered address, and geofencing is built for a device that moves. The logic may even run on the device itself, which AFC never allows. Read GVP as AFC without the fixed address, the first 6 GHz regime designed for Wi-Fi that moves, outdoors, at real power.

What it means for you Once approved systems and certified hardware arrive, GVP will fill the gap VLP cannot reach: higher power than VLP, outdoors, without a fixed AFC registration.

When you plan a 6 GHz cell under any of these four methods, are you sizing to the AP's live output, or to the power the client is actually allowed to answer with?

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