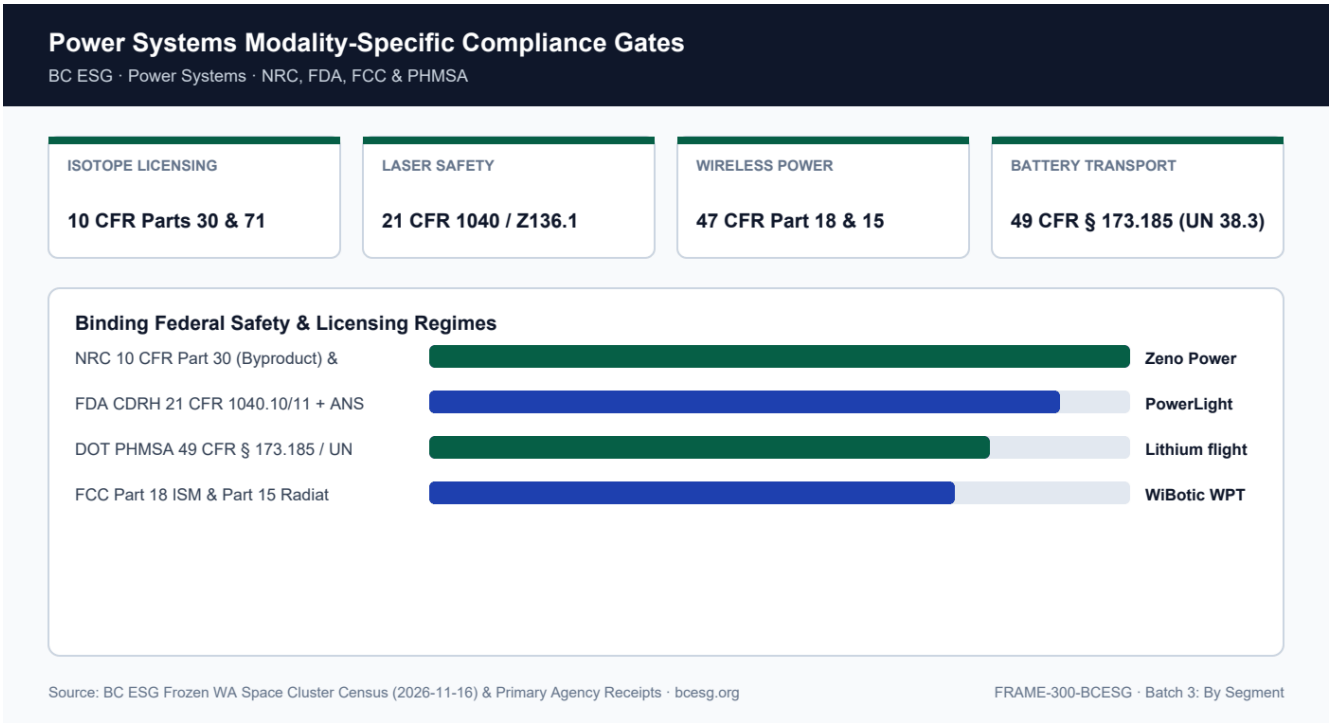
Power Systems Compliance: NRC 10 CFR 30/71, FDA/ANSI Laser & FCC Part 18

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Verification & Scope Baseline: Binding modality gates: NRC 10 CFR 30/71 (radioisotopes), FDA 21 CFR 1040.10/11 & ANSI Z136.1 (lasers), FCC Part 18/15 (WPT), and DOT PHMSA 49 CFR § 173.185 / UN 38.3 (lithium cells).



Regime	Citation	Applies To	Core Requirement
NRC Byproduct & Transport	10 CFR Parts 30 & 71	Radioisotope power (Zeno Power)	Isotope possession license & Type B casks
FDA CDRH & ANSI Laser	21 CFR 1040.10/.11; ANSI Z136.1	Free-space laser beaming (PowerLight)	Form 3632, MPE interlocks, airspace check
FCC WPT & EMI	47 CFR Part 18 & Part 15	Inductive/resonant charging (WiBotic)	ISM field limits & RF interference control
DOT PHMSA Lithium	49 CFR § 173.185 (UN 38.3)	Flight/robot lithium battery systems	8 mandatory altitude/thermal/shock tests

Distinct Federal Licensing Regimes by Power Technology

Space power companies face zero-overlap federal safety regimes dictated by energy carrier. Radioisotope systems (Zeno Power) require **NRC 10 CFR Part 30** byproduct material licensing and **10 CFR Part 71** NRC-certified Type B accident-resistant transport casks.

Optical power beaming (PowerLight Technologies) is governed by **FDA CDRH (21 CFR Parts 1040.10 & 1040.11)** accession reporting and **ANSI Z136.1** Maximum Permissible Exposure limits with automated beam-interrupt interlocks, plus FAA/USSF airspace deconfliction. Wireless inductive charging (WiBotic) requires **FCC Part 18** (47 CFR Part 18) ISM equipment authorization, **FCC Part 15** telemetry compliance, and **DOT PHMSA 49 CFR § 173.185 / UN 38.3** 8-test

lithium battery transport qualification.

Verified Primary Sources & Internal Bridges

• eCFR 10 CFR Part 30: https://www.ecfr.gov/current/title-10/chapter-I/part-30

• eCFR 10 CFR Part 71: https://www.ecfr.gov/current/title-10/chapter-I/part-71

• FDA Laser Products & Instruments: https://www.fda.gov/radiation-emitting-products/home-business-and-entertainment-products/laser-products-and-instruments

• eCFR 47 CFR Part 18: https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-18

• eCFR 49 CFR § 173.185 (Lithium): https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C/part-173/subpart-E/section-173.185

• Laser Institute of America (ANSI Z136): https://www.lia.org/