NPXai vs. Public LLMs

Why Purpose-Built for Nuclear Matters

Feature/Capability	NPXai (Built for Nuclear)	Public LLMs (General Purpose AI)
Trained on Nuclear- Specific Content	Yes, Includes regulatory docs, SOPs, tech specs, OPEX reports	No, General internet and public datasets only
Domain-Specific Language Understanding	Deep understanding of nuclear terminology, acronyms, and processes	Limited – May misinterpret industry terms
Security & Data Sovereignty	Built with secure, controlled environments for regulated industries	Data often processed externally (cloud-based)
Customization for Nuclear Workflows	Aligned with nuclear workflows, asset lifecycles, and governance	Generic, no built-in industry- specific flows
Traceability & Explainability	Outputs can be traced back to source documents	Often lacks citations or transparency
Alignment with Regulatory Standards	Designed with CNSC/NEI/IAEA frameworks in mind	Not aligned with nuclear compliance needs
On-Prem/Private Cloud Deployment	Yes, Options for deployment in secure environments	Typically cloud-only (limited control)
Team Collaboration Features	Designed to work within nuclear teams' structured approval flows	Individual-focused, lacks team governance features
Data Ownership & Control	Your data stays within your environment	Data may be used for training or stored externally
Support & Updates from Nuclear Experts	Built and supported by experts in nuclear + Al	General Al support, no nuclear expertise