

Project Dreadnaught — Jobs Overview

Bethune, Kershaw County, South Carolina | Construction & Operations Employment

NEAR-TERM BUILD (First Campus)

Scope: ~100 MW online in 2027 (grid + matching behind-the-meter), followed by ~400 MW additional over the next ~2.5 years. Total initial campus approximately 500–650 MW IT load + large battery storage + large fuel-cell fleet (+ possible solar).

Construction Employment

- Peak workforce during heaviest phases: **1,200 – 2,200** people on site
- Sustained average over the multi-year build: **700 – 1,400** construction-related jobs
- High-wage trades: electrical, mechanical, civil, controls, specialized fuel-cell & battery technicians

Permanent Operations + O&M; (once full initial campus is online)

- Data center operations: roughly 0.15–0.30 jobs per MW
- Fuel-cell fleet + battery storage add meaningful technical O&M; roles
- Realistic steady-state total: **150 – 280** permanent on-site jobs

Major Capital Refresh Cycles

- Fuel-cell stack replacements and battery augmentation create recurring waves of skilled work every 5–10 years (hundreds of specialized jobs returning to site periodically).

LONGER-TERM SCALE (to 1.4 GW Grid + Matching Behind-the-Meter)

If executed over an approximately 8–10 year period, the project becomes a continuous industrial construction program rather than a short spike.

- Average construction-related employment over the full build-out: **1,000 – 2,000+** jobs sustained for many years
- Peak years can exceed 2,500–3,000 when multiple phases overlap
- Steady-state permanent O&M; once fully built: **350 – 600+** on-site technical jobs

Even the first phase is not a quick in-and-out job. We are looking at several years of strong construction employment with good pay, followed by a few hundred permanent technical operations jobs. If we continue scaling as intended, this becomes a ten-year construction program and a long-term technical employment base — not the typical “two years of work then fifteen people left behind” story.

Note: All figures above exclude induced or attracted employment from companies that typically locate near large computing capacity. Those additional economic effects are real but are kept separate for clarity.

Sources (summary): Construction intensity 0.7–2.0 workers/MW from Hamm Institute for American Energy, Data Center Employment Forecast Analysis (Nov 2025). Permanent operations baselines 0.15–0.35 FTE/MW from the same report; adjusted upward for large on-site fuel-cell + BESS O&M.; Supporting examples include Google Kansas City (0.4 jobs/MW) and Virginia statewide data. Full source list on following page.

Exhibit A — Supporting Sources

Primary references used for the jobs ranges in the Project Dreadnaught Jobs Overview

1. Hamm Institute for American Energy (Oklahoma State University)

Data Center Employment Forecast Analysis, November 2025.

Primary source for construction intensity (0.7–2.0 workers per MW) and operations intensity (0.15–0.35 FTE per MW).

https://hamminstitute.org/site-files/documents/data_center_workforce.pdf

2. Data Center List

How Many Jobs Does a Data Center Create? (updated July 2026).

Confirms construction range 0.7–2.0 per MW and cites Virginia operations data (~0.09–0.10 FTE/MW).

<https://www.datacenterslist.com/stats/jobs>

3. PoweredByWho – Jobs Estimate Methodology

Industry staffing benchmarks for permanent operations.

Cites 0.3–0.5 permanent jobs per MW range and Google Kansas City example (200 jobs at 500 MW = 0.4/MW).

<https://poweredbywho.com/methodology/jobs>

4. McKinsey / Public reporting on Google Kansas City campus

500 MW campus employing approximately 200 permanent full-time workers.

Real-world hyperscale example at 0.4 jobs per MW.

Referenced in multiple 2025 industry summaries including PoweredByWho and McKinsey data-center reports.

5. Mangum Economics / Northern Virginia Technology Council (NVTC)

Virginia data-center workforce analyses (various years, most recent cited 2020–2025).

Statewide direct operations employment implying roughly 0.09–0.10 FTE per MW in the most automated U.S. market.

Cited in Data Center List and related Virginia economic impact studies.

6. CBRE and industry construction reports (2024–2026)

Multiple CBRE North America Data Center Trends and related analyses.

Support typical peak construction staffing for 50–100 MW builds in the hundreds of workers, consistent with the per-MW ranges above.

Various CBRE publications 2024–2026.

7. Real-project peak employment examples (2025–2026 reporting)

OpenAI Stargate (Abilene), Meta campuses, Vantage and others.

Public reporting of peak construction headcounts that fall within or above the 0.7–2.0 workers/MW band when normalized by capacity.

Local and national press coverage compiled in Hamm Institute appendix and industry summaries.

8. Bloom Energy field-service hiring patterns

Public job postings for Field Service Technicians and related O&M; roles.

Illustrates that large solid-oxide fuel-cell deployments require ongoing specialized technical staffing beyond pure data-center operations.

Bloom Energy careers / public job listings (2025–2026).

Method note: Construction ranges are taken directly from the Hamm Institute 2025 forecast. Permanent operations ranges begin from the same source and from observed hyperscale examples, then are adjusted upward to reflect the additional O&M; burden of a large on-site fuel-cell fleet and battery energy storage system. No induced or multiplier jobs are included in the figures.