



Data Centers & Critical Infrastructure Design Challenge

PROJECT TITLE	PROJECT CATEGORY
JUDGE NAME	DATE

Scoring scale. 1 Minimal or absent · 2 Developing · 3 Adequate · 4 Strong · 5 Exceptional

CRITERION, AND WHAT FULLY ADDRESSING IT LOOKS LIKE		1 MIN.	2 DEVEL.	3 ADEQ.	4 STRONG	5 EXCEP.	SCORE
THE FOUR DISCIPLINARY PILLARS							
1	Scientific Foundation (Pillar 1) Grounds the problem and solution in correct, relevant scientific principles: physics, chemistry, biology, and environmental science, as applicable.	☐	☐	☐	☐	☐	___ / 5
2	Applied Science & Engineering (Pillar 2) Translates those principles into a sound technical solution and a coherent system design.	☐	☐	☐	☐	☐	___ / 5
3	Supply Chain & Logistics (Pillar 3) Addresses implementation feasibility: materials, infrastructure, sourcing, timelines, and operational needs.	☐	☐	☐	☐	☐	___ / 5
4	Environmental & Sustainability Analysis (Pillar 4) Evaluates ecological impact, resource use, emissions, community effects, and long-term viability.	☐	☐	☐	☐	☐	___ / 5
PROBLEM, ANALYSIS & EVIDENCE							
5	Problem Definition & Framing Problem is clearly identified and framed within the chosen category and the site context.	☐	☐	☐	☐	☐	___ / 5
6	Awareness of Tradeoffs Demonstrates awareness of key tradeoffs across technical, economic, environmental, and social dimensions.	☐	☐	☐	☐	☐	___ / 5
7	Visual System Design Includes a clear, required diagram that communicates the system design effectively.	☐	☐	☐	☐	☐	___ / 5
8	Stakeholder Identification Identifies the relevant stakeholders and clearly explains their roles.	☐	☐	☐	☐	☐	___ / 5
9	Technical Support & Evidence Provides basic calculations, sourced assumptions, or modeling to support the proposed solution.	☐	☐	☐	☐	☐	___ / 5
10	Solution Feasibility & Real-World Viability Accounts for continuous 24/7 operation and basic cost and feasibility realities; the solution is plausible in practice.	☐	☐	☐	☐	☐	___ / 5
TOTAL POINTS EARNED							/ 50

COMMENTS AND FEEDBACK FOR THE TEAM

JUDGE SIGNATURE

DATE