Your Assignment (Phase 1 Memo)

Your team has been asked to prepare a **three-page memo** for Hypercompute's senior leadership that addresses the following **four core areas**.

Required Memo Sections & Questions

1. Market and Location Analysis: Shortlisting Three U.S. Regions

Objective: Assess U.S. market conditions impacting hyperscaler power procurement and grid integration, focusing on electricity demand growth, grid capacity constraints, regulatory oversight, and clean energy availability.

Question: Which three U.S. states should Hypercompute evaluate as leading candidates for this data center, and why?

Analysis should:

- Select **three distinct U.S. states** and focus on comparative evaluation of locations
- Consider factors such as:
  - Grid capacity and reliability
  - Interconnection timelines
  - Availability of clean generation
  - Regulatory environment
  - Potential for co-location with generation or transmission
  - Optional participation in power markets (i.e. alternative revenue streams)
- Briefly explain why each location is attractive *and* what risks or constraints it presents

2. Power Supply Strategy: Generation Mix Prioritization & Data Center Development Strategy

Objective: Develop a preliminary reliable, cost-effective, and scalable power supply strategy for Hypercompute's 360 MW Tier III AI/ML data center by prioritizing generation and procurement options that ensure high availability while measurably advancing the company's long-term decarbonization goals. Also consider how Hypercompute might develop this data center.

Question: What types of power generation and supply arrangements should Hypercompute prioritize to reliably serve their data center while advancing decarbonization goals?

Data center characteristics:

- Load: ~360MW
- Use: training for AI/ML
- Required reliability: Tier III

Response should:

- Identify **2–3 priority generation or supply options** (e.g., behind-the-meter renewables + storage, firm clean power, utility capacity, hybrid approaches)
- Explain **why these options are suitable** given load shape, timeline, and reliability needs
- Address tradeoffs across:
  - Cost
  - Speed to deployment

- o Emissions impact
- o Regulatory complexity
- o Scalability to future expansion
- Consider different methods of data center development that align with the data center's needs, and prioritized locations identified in section 1 (e.g. new development, retrofitting, co-location, combination, etc.)

A detailed financial model isn't required, but analysis should articulate cost and risk considerations.

3. Key Risks and Mitigation Strategies

Objective: Identify the most material risks to Hypercompute's 360 MW data center power strategy across reliability, cost, decarbonization, and execution, and define mitigation approaches that leverage proactive utility engagement, market participation, and flexible procurement structures.

Question: What are the most material risks to Hypercompute's power strategy for this data center, and how should they be mitigated? Your risk assessment should include **at least three risks**, such as:

- Regulatory or permitting delays
- Grid congestion or transmission constraints
- Cost overruns or rate impacts
- Clean energy supply limitations
- Community or political opposition
- Demand forecast uncertainty

Present risks in a **clear table** with proposed mitigation strategies.

4. Initial Recommendations

Objective: Present high-level recommendations for what your advisory team initially assesses to be the most optimal power procurement strategies and locations for Hypercompute to meet near- and medium-term power needs while positioning itself for long-term growth.

Question: Pending further research in Round 2, what are the 2-3 most optimal power procurement strategies to satisfy Hypercompute's compute needs for its planned data center? What do you see as the 1-2 most viable strategies for developing this data center based on your prioritized locations above, and the data center needs.

- Highlight **preferred power procurement and partnership approaches** that your team will conduct further research into in Round 2; you do not need to concretely select a single procurement structure in this round.
- Recommend how Hypercompute **might share costs and risks with utilities or other partners**.
- Recommend **1-2 potentially optimal paths for data center development** (greenfield, brownfield, colocation, etc.)
- Explain how these recommendations support business growth, grid reliability, and sustainability commitments.

What We Are Looking For

Strong submissions will:

- Demonstrate **strategic judgment**, not just technical knowledge
- Make **clear assumptions** and defend them
- Show an understanding of **utility incentives and regulatory realities**
- Balance ambition on decarbonization with operational realism
- Be concise, structured, and decision-oriented

You are encouraged to use external sources and exhibits, but clarity of thinking matters more than volume of analysis.

Deliverable Summary (Phase 1)

- **Format:** 3-page memo (plus optional appendix)
- **Font:** 11-point, 1.5 spacing, 1-inch margins
- **Appendix:** Optional, up to 4–5 exhibits
- **Audience:** Hypercompute senior leadership