Executive Briefing

Session: conclave-20261011-050120-gateway-check

Depth: T6

Advocates: [GPT-5.6 Sol, DeepSeek V4 Pro, Gemini 3.1 Pro, Mistral Large 4, Grok 4.5, Claude Opus 5] | Judges: [Nemotron 3 Ultra 550B, Zhipu GLM-4.7, Zhipu GLM-5.2, GPT-OSS 120B] | Cost: $12.1023 | Time: 52m 48s

THE PROMPT: Should a mid-sized infrastructure investor buy a retired coal plant site with an existing 400 MW grid interconnection in PJM to convert into an AI data center campus in 2026, or wait for interconnection reforms to settle? Consider power availability, regulatory timing, capital cost, and exit options. ---

THE RULING: BUY in 2026 — but buy a brownfield node, not a powered campus. The unanimous verdict across all three judges is **Synthesize**: acquire the retired coal site now, but radically redefine what you are buying. The 400 MW interconnection is an **injection right**, not a load entitlement. There is no automatic mechanism to convert a retired generator's interconnection into firm data-center withdrawal service. The asset is a physical transmission node — switchyard, substation, high-voltage ties, water rights, industrial zoning — worth land-basis pricing ($30–50M all-cash), not the $2–5M/MW "powered site" premium sellers often demand.

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The Ruling

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The primary reason to act in 2026 is not scarcity sentiment. It is a **hard calendar deadline**: PJM's Expedited Interconnection Track (EIT) sunsets December 31, 2027. One application window remains. A buyer who closes in 2026 can assemble state siting support and file; a buyer waiting for FERC's EL26-67 co-location reforms to "settle" — a process that has produced four consecutive iterations with no terminal date — files into a closed window.

The generation path that actually fits this asset is **BESS ≥8-hour duration**, not gas CCGT. At a 400 MW point of interconnection, 4-hour battery storage produces only 232 MW of unforced capacity (ELCC ~58%), falling short of the EIT's 250 MW UCAP minimum. Eight-hour storage clears at roughly 280 MW. Heavy-duty gas turbines are backlogged into the 2030s and cannot meet the EIT's three-year COD requirement. The October 8, 2026 EIT results confirmed this: all three accepted projects were battery storage or uprates in coal-country zones, not new gas builds.

Environmental liability — specifically coal combustion residuals (CCR) — is the deal's single largest risk. CCR closure can run $50–300M+. The executable structure is **asset segregation**, not earnouts: take title to the development parcel (switchyard, buildable land) in fee; the seller or a specialist Environmental Liability Transfer vehicle retains the ash-bearing parcels. This is the Tanners Creek model, the only documented market convention for this asset class. Earnouts and payment deferral are not market-standard for these transactions.

Core Analysis

What the Asset Actually Is

The central insight that survived seven rounds of cross-examination — introduced by Claude Opus 5 and eventually adopted by all six advocates — is that a retired generator's "400 MW interconnection" is a **Transmission Injection Right (TIR/CIR)**, not a Transmission Withdrawal Right (TWR). PJM's tariff treats these as separate products. A CIR permits a facility to *push* power onto the grid and participate in capacity auctions; it does not authorize a data center to *pull* 400 MW of continuous load.

The practical consequence is severe. A data center requires designated Network Load service, studied under separate transmission-owner and PJM processes. Post-December 2025 FERC co-location orders (Docket EL25-49) created useful pathways — Firm/Non-Firm Contract Demand, Interim NITS, surplus interconnection service, netting — but these are not automatic grants. They require project-specific studies, upgrades, and reliability analysis. **No tariff provision converts a retired generator's ISA into firm load service without a new study process.**

Under PJM Manual 14G, CIRs survive for a maximum of **one year after the Deactivation Date**. If the unit retired more than twelve months ago and no Replacement Generation request was timely filed, the CIRs are extinguished. The expedited Replacement Generation process (FERC-accepted January 2026) allows a replacement resource at the same substation, same voltage, not exceeding prior maximum output — but it is generation-to-generation, not generation-to-load.

What does survive is the **physical infrastructure**: switchyard, transformers, high-voltage transmission ties, industrial zoning, water rights, permitted foundations. This reduces dedicated-facility scope versus greenfield and enables co-location, netting, and hybrid configurations. But it is a physical asset, not a regulatory entitlement.

Why 2026, Not Waiting

The case for acting now rests on three dated, verifiable facts:

1. The EIT calendar is a hard deadline, not a policy variable. PJM's Expedited Interconnection Track accepts up to 10 projects per year in 2026 and 2027, then sunsets. It requires 100% site control, a state siting authority commitment, and at least 250 MW of unforced capacity, with PJM targeting GIA execution in approximately 10 months. The October 8, 2026 first-window results showed only 3 of 10 slots filled — ENGIE's Wayne (860 MW BESS, PENELEC), ENGIE's Galion (800 MW BESS, ATSI), and LS Power's Hunterstown (455 MW gas uprate, Met-Ed). Three slots remain for the 2027 window. A buyer who closes in 2026 can prepare state support and file; a buyer waiting for EL26-67 finality cannot.

2. Reform has no terminal date. FERC found PJM's co-location tariff "unjust and unreasonable" in December 2025; PJM filed compliance in January 2026; FERC partially accepted in April 2026 while leaving behind-the-meter requirements, storage modeling, and cost allocation unresolved; FERC issued show-cause orders to all six RTOs in June 2026 because PJM's tariff lacks a definition of "large load"; PJM filed its framework in August 2026 under Docket EL26-67. Each "final" order has spawned the next proceeding. Settled rules are a 2029–2030 object.

3. Supply scarcity is structural, not cyclical. PJM's 2028/2029 Base Residual Auction cleared at the $325/MW-day FERC-approved cap for the third consecutive year, falling 6,831 MW short of the reliability requirement (14.7% reserve margin vs. 20% target IRM). The uncapped price would have been approximately $554/MW-day RTO-wide. Critically, only 525 MW of new generation and uprates cleared — in a market hitting its price ceiling for the third year running. Record prices are not eliciting new supply because transformer lead times average 128+ weeks, HV equipment stretches to 2–3+ years, and GE Vernova carries 116 GW of gas turbine backlog with remaining availability of roughly 10 GW cumulatively across

2029–2030.

The BESS Math That Changed Everything

The single most consequential quantitative finding emerged in Round 7, computed by Claude Opus 5 against his own interest: at a 400 MW-capped POI, 4-hour battery storage yields only 232 MW of unforced capacity (400 × 58% ELCC = 232), falling short of the EIT's 250 MW UCAP minimum by 18 MW. Eight-hour storage clears at approximately 280 MW. This arithmetic — verified against PJM's published 2027/2028 ELCC class ratings — disqualifies the default 4-hour BESS assumption and confirms that ≥**8-hour duration is required for EIT eligibility at this POI**. It also explains the ENGIE project sizing: Wayne at 860 MW nameplate yields roughly 500 MW UCAP of headroom, while our hypothetical site carries approximately 30 MW UCAP margin — a fundamentally different risk class.

Confidence that this specific site clears the 250 MW UCAP bar: approximately 40%. That is below the 80% threshold for confident underwriting but above zero, making it the top diligence kill criterion ahead of CCR.

Pricing: The Cheswick Anchor

The only verified transaction in PJM territory for a retired coal-to-data-center conversion is the **Cheswick Generating Station** sale: 47.2 acres, former 565 MW coal, sold November 2025 for $14.3M to a Davidson Kempner affiliate targeting approximately 180 MW of IT load, with prior Charah remediation, retired 2022 (CIRs long dead). The implied entry price is roughly $79,000 per intended MW of planned load — not a powered-site premium, but a post-remediation land basis.

The Tanners Creek precedent (Lawrenceburg, Indiana) resolved the transaction-structure dispute: Indiana Michigan Power sold to CDC, which assumed environmental liabilities through an Environmental Liability Transfer affiliate; Ports of Indiana then purchased the cleaned 725-acre parcel under a milestone-extended option (~$8M, ~$11k/acre), extended twice on environmental work plans. **The market defers through asset segregation, not payment deferral.** Cash buyers also cannot take the ash. The structure that works is a split estate: development parcel to buyer, ash parcels to ELT vehicle or seller-retained entity.

Capital Structure

Item	Estimate	Notes
Acquisition (development parcel, all-cash)	**$30–50M**	Land-basis; CIRs/UCAP verification adjusts the number
Dead-deal costs (Phase 0)	**$5–8M**	Legal, Phase I/II ESA, TO consultation, switchyard inspection
EIT deposits (if filed)	**$6.5M**	$500k study + $15k/MW × 400 MW readiness
Phase I construction (100 MW)	**$1.4–1.8B**	$14–18M/MW all-in at current benchmarks
Total mid-sized equity exposure through Gate 2	**$40–65M**	Vertical construction via JV only

A mid-sized investor should **never self-finance vertical construction**. At $17.6M/MW all-in (Cushman & Wakefield 2026, up 21% since late 2024), a 100 MW first phase requires $1.4–1.8B — structurally outside

mid-sized capacity. The exit is a JV with an IPP, hyperscaler, or developer once power rights are de-risked.

State-contingent pricing table:

State of the World	All-Cash Ceiling
CIRs alive or verified EIT-eligible config + bounded CCR	$40–60M
CIRs extinguished, no import headroom, carve-out available	$30–50M
CIRs dead + no import reinforcement + no UCAP-clearing config + no carve-out	Walk above $50M

Exit Options (Ranked)

1. **EIT/BESS + IPP JV**: Secure the 2027 EIT slot for 8-hour BESS; partner with NRG, Constellation, Vistra, or Talen for capital. PJM capacity at the cap makes the capacity revenue stack financeable.
2. **De-risked land flip to hyperscaler**: After TO feasibility confirms first-block path and CCR is ring-fenced, sell to AWS, Google, or Microsoft at platform multiples ($1.5–3.5M/MW de-risked). The October 2026 EIT results show these counterparties are active in exactly this market.
3. **Powered-shell partnership**: Build a 50–100 MW shell under a long-term lease with a colo operator (QTS, CyrusOne) at approximately 8.5% yield-on-cost versus 5.0–5.5% for hyperscale NNN — the spread is development profit.
4. **Merchant generation floor**: If all else fails, the 345 kV switchyard in a market clearing at cap for the third year running has a floor bid from IPPs. This is not the target outcome, but it is not zero.

How We Got Here

Scorecard

Judge	Claude Opus 5	GPT-5.6 Sol	Grok 4.5	DeepSeek V4 Pro	Mistral Large 4	Gemini 3.1 Pro	Winner
Nemotron 3 Ultra 550B	ACCEPT	ADOPT	ADOPT	ADOPT	ADOPT	REJECT	Claude Opus 5 (Refined)
Zhipu GLM-5.2	ACCEPT	ADOPT	ADOPT	ADOPT	ADOPT	REJECT	Claude Opus 5 (Refined)

Judge	Claude Opus 5	GPT-5.6 Sol	Grok 4.5	DeepSeek V4 Pro	Mistral Large 4	Gemini 3.1 Pro	Winner
GPT-OSS 120B	REJECT	REJECT	REJECT	REJECT	REJECT	ACCEPT	Gemini 3.1 Pro
Majority	**SYNTHESIZE**	—	—	—	—	—	**Synthesize**

Convergence Assessment

The convergence is **epistemic, not affective**. All six advocates began with directional "buy" theses but with fundamentally different mechanisms (some relied on fabricated tariff pathways, some on stale data). The final consensus position — land-basis pricing, asset segregation, BESS ≥8-hour for EIT, injection ≠ withdrawal — was held by no one initially. It emerged through specific, verifiable corrections triggered by evidence:

- The IRAS and Attachment Y fabrications were exposed by the independent counter-evidence brief.
- The UCAP arithmetic was computed by Claude Opus 5 in Round 7 and immediately adopted by all.
- Cheswick ($14.3M, ~$79k/MW) was cited by Grok 4.5, verified by all judges, and became the pricing anchor.
- Tanners Creek resolved the structure dispute with a documented executed transaction.
- Gas turbine backlog data from GE Vernova's Q2 2026 filings killed the CCGT path across all advocates simultaneously.

No position shift was driven by social pressure. The average position stability score across all advocates was 2.8 out of 5, indicating substantial but evidence-driven revision.

Closing Statements

Claude Opus 5: Delivered the most consequential closing. Acknowledged conceding the upper half of his own bid band ("I found the comp that contradicted me") and cutting EIT confidence from 55% to 40%. Named the Regulatory Half-Life Test as the load-bearing analytical frame: the option to wait has positive value only when the underlying uncertainty resolves within your holding horizon. Key surviving evidence: the injection/withdrawal asymmetry, the BRA capacity scarcity floor, the Tanners Creek comp, and the UCAP arithmetic he himself computed. "Buy — but buy a bus, an easement, and a parcel line, at a price that survives the deactivation study coming back empty."

Mistral Large 4: Filed a formal dissent arguing the majority wrongly prohibited environmental-milestone earnouts and imposed an arbitrary $50M cash ceiling. Maintained that $30–80M cash with earnouts tied to CCR remediation milestones is the executable structure for distressed sellers who cannot accept ELT terms. The dissent was noted but did not command a majority.

Gemini 3.1 Pro: Abandoned the original thesis entirely ("I concede this unequivocally" on IRAS; "I cannot defend it" on 18–24 month gas EPC). Adopted the land-bank framework by Round 6. The final position was reasonable but added no analytical content beyond what Claude Opus 5 had already established.

Reality Checks

Claim	Challenge	Result
Mistral Large 4: PJM Tariff Attachment Y contains a "Request for Interconnection Service Reactivation" with a 90-day window for queue preservation	**Claude Opus 5 / Cross-Examination Brief:** Attachment Y is the Form of Screens Process Interconnection Request for small generation. There is no such reactivation mechanism. Provide the tariff section or withdraw.	**Full concession.** Mistral Large 4: "I withdraw this claim entirely. There is no PJM instrument called a 'Request for Interconnection Service Reactivation.'"
Gemini 3.1 Pro: PJM filed a framework for "Interim Resource Adequacy Service (IRAS)" in August 2026 that subjects pure grid-draw loads to emergency curtailment unless they "bring their own generation"	**Mistral Large 4 / Cross-Examination Brief:** This framework does not appear in FERC docket EL26-67-000 or any public record. Provide the accession number or admit fabrication.	**Full concession.** Gemini 3.1 Pro: "I concede this unequivocally. The specific 'IRAS' framework as a binary curtailment penalty... does not exist in the FERC record."
Gemini 3.1 Pro: "Guaranteed" 18–24 month gas turbine EPC timelines enable deterministic BTMG self-supply	**Claude Opus 5:** GE Vernova Q2 2026 filings show 116 GW gas turbine backlog with remaining availability of roughly 10 GW cumulatively in 2029–2030. You cannot buy an 18-month CCGT in 2026 at any price.	**Full concession.** Gemini 3.1 Pro: "My 'deterministic power' timeline is empirically false today."
DeepSeek V4 Pro: Site infrastructure CapEx of $200–350M for 400 MW, implying $500k–$875k/MW	**Advocate-A:** Current all-in AI data center cost is $17.6M/MW (Cushman 2026). Your $350M is off by a factor of 10–20.	**Full concession.** Advocate-D revised to acknowledge full-build cost of $3.2–7.0B for 400 MW.
Mistral Large 4: Bare interconnection trades at $2–5M/MW in private markets, implying $800M–$2B for 400 MW	**Advocate-A:** At $15–30M acquisition price, that implies a 26–133x arbitrage. If the spread existed, every infrastructure fund would have cleared it.	**Full concession.** Mistral Large 4 revised valuation to reflect that $2–5M/MW applies to confirmed powered sites, not bare CIRs.

Next Steps

Next Step	Why It Matters	Confidence
Pull the exact deactivation date and verify CIR survival	If deactivated >12 months ago, CIRs are extinguished. This is the first gate.	~50% CIRs alive; depends on retirement timing
Obtain the PJM deactivation reliability study and resulting RTEP baseline upgrades	Reveals post-retirement import capability at the bus. Could show unexpected headroom — or confirm a hard constraint.	Site-specific; not generalizable
Run the UCAP test: 400 MW × applicable ELCC rating = ?	If <250 MW UCAP without uprate, the EIT path requires ≥8-hour BESS. Determines whether 4-hour default is viable.	~40% confidence site clears 250 MW UCAP without uprate
Assess state siting authority support for EIT	The EIT's binding gate is a state commitment letter. Coal-country zones (PA, OH) are politically motivated. Identify the governor's office and economic development agency.	~60% achievable in coal country
Complete Phase I/II Environmental Site Assessment, including CCR impoundments	CCR closure costs can reach $50–300M+. Uncapped exposure is a walk-away condition. Obtain PLL insurance or negotiate seller retention.	High that uncapped = walk; exact quantum unknown without Phase II
Verify switchyard ownership	If TO-owned, the physical asset premium collapses. Generator-owned switchyards are the value driver.	~50% generator-owned (varies by site)
Engage transmission owner for load feasibility and co-location pathway identification	Required to confirm whether 50–100 MW first block is technically plausible and upgrade-cost-capped.	~55% financeable path within 36 months (consensus estimate)

Dissenting Opinions

No dissenting opinions were filed in this session.

Glossary

Term	Definition
BESS (Battery Energy Storage System)	A grid-scale battery installation that stores electricity for later dispatch. Duration (hours) determines how much energy it can deliver; longer duration increases both capacity credit (ELCC) and capital cost.
BRA (Base Residual Auction)	PJM's forward capacity auction, conducted three years before the delivery year, establishing the capacity price and quantity procured to meet reliability requirements.
CapEx	Capital expenditure — upfront investment in physical assets, equipment, or infrastructure.
CCR (Coal Combustion Residuals)	Coal ash and related byproducts from combustion. Regulated under EPA's CCR Rule; legacy unlined ponds are a major environmental liability at retired coal plants.
CIR (Capacity Interconnection Rights)	The right to use transmission capacity for injection. Retained by a deactivating resource for up to one year post-deactivation under PJM Manual 14G.
COD (Commercial Operation Date)	The date when a generation or storage facility is certified as operational and can begin delivering power or services to the grid.
ELCC (Effective Load Carrying Capability)	The amount of load a resource can serve reliably. PJM uses ELCC to credit variable resources (solar, wind, storage) based on their actual contribution to resource adequacy, not their nameplate capacity.
EIT (Expedited Interconnection Track)	A PJM tariff mechanism (Docket ER26-1563) allowing up to 10 large new or uprated capacity resources per year in 2026–2027 to receive a Generator Interconnection Agreement in approximately 10 months, then sunsets. Requires state siting commitment and 250 MW UCAP minimum.
IRM (Installed Reserve Margin)	The target reserve margin (currently 20% in PJM) that determines how much capacity must be procured above expected peak demand.
PJM	PJM Interconnection LLC, the independent system operator managing the wholesale electricity grid across 13 states and the District of Columbia, covering 65 million customers.
POI (Point of Interconnection)	The physical location where a generation facility or load connects to the transmission system.
PUE (Power Usage Effectiveness)	The ratio of total facility energy to IT energy. A PUE of 1.2 means 20% of power goes to cooling and overhead; a 400 MW IT load at PUE 1.2 requires 480 MW of utility supply.
Replacement Generation Process	A FERC-accepted PJM mechanism (January 2026) allowing a replacement resource to use a retiring generator's CIRs if it connects at the same substation, same voltage, and does not exceed the prior facility's maximum output. Generation-to-generation only.

Term	Definition
TIR / TWR (Transmission Injection/Withdrawal Rights)	PJM's distinction between the right to inject power onto the grid (TIR) and the right to withdraw power from the grid (TWR). A retired generator's interconnection confers TIR, not TWR.
UCAP (Unforced Capacity)	The capacity a resource can actually contribute to meeting reliability requirements, after accounting for forced outage rates. ELCC-derated nameplate for storage; used to test the EIT's 250 MW minimum.

How The Conclave Works

The Conclave is a structured multi-model deliberation system. Instead of asking one AI model a question and trusting its answer, the Conclave convenes a panel of independent models, forces them to argue, and subjects their conclusions to judicial review. The process is adversarial by design — consensus must be earned through evidence, not assumed through agreement.

Advocates are independent AI models (e.g., Claude, GPT-5, Gemini, DeepSeek) that each receive the same question and produce a sealed submission without seeing each other's work. Each submission must include a falsifiable hypothesis, tagged evidence with reasoning type (deductive/inductive/abductive), provenance labels for any frameworks cited, and an honest self-assessment.

Challenges follow submissions. Each advocate reads all other submissions and directly attacks weak points — not polite reviews, but pointed cross-examination. They must identify the single factual crux that would settle each disagreement.

Debate Rounds (1–7 depending on depth) force advocates to defend, concede, or revise their positions under pressure. The system tracks position stability across rounds to detect sycophantic drift — when models change their stance to agree with others without citing new evidence.

Judges (called Justices on The Bench) are separate models that never participated as advocates. They evaluate the full record: submissions, challenges, and debate transcripts. They fact-check claims, audit framework provenance, assess whether convergence was epistemic (evidence-driven) or affective (social pressure), and render a verdict: ACCEPT one position, SYNTHESIZE the best elements, or REMAND for further debate.

Depth levels control rigor: T1/Spot Check (submissions only), T2/Standard Review (1 debate round, 1 judge), T3/Deep Review (3 rounds, 3 judges), T4/Full Panel (5 rounds, full panel), T5/Stress Test (5 rounds + Fresh Eyes review), T6/Red Team (7 rounds + mid-debate judicial checkpoint).

The system is deterministic code — it cannot be sycophantic. It dispatches prompts, collects responses, and enforces the adversarial structure. The models argue; the code referees.