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Stage: T1 | **Type:** Battery Energy Storage System (BESS) | **Scale:** 150 MW / 600 MWh

PRIORITY

1 EXECUTIVE SUMMARY

Keystone Ridge BESS represents a high-confidence early-stage opportunity in one of PJM's most active storage markets. Constellation Energy Development, with eight comparable BESS projects completed across PJM, has filed a 150 MW / 600 MWh interconnection application in York County, Pennsylvania — a site that qualifies for the IRA energy community adder and sits in PJM's EMAAC zone, which historically commands above-average capacity market revenues. Pennsylvania's Act 129 Phase IV compliance deadline in April 2026 creates a defined procurement window with near-term urgency. The EPC contract is expected to be awarded in Q3 2026, making the current pre-qualification window the right moment for Meridian Energy Solutions to establish a position with Constellation's development and engineering teams.

Why Meridian Energy Solutions? Meridian Energy Solutions brings demonstrated BESS commissioning experience in PJM territory and established relationships with major lithium-ion integrators — directly addressing the two supply chain risks Constellation will weigh heavily in EPC selection. Meridian's IRA tax credit structuring capability (domestic content tracking, prevailing wage compliance) is a defensible differentiator in a competitive field where most bidders will be weak on incentive optimization.

2 PROJECT OVERVIEW

District / Owner	Constellation Energy Development
Project Type	Battery Energy Storage System (BESS)
Location	York County, PA — PJM EMAAC Zone
Scale	150 MW / 600 MWh
Technology	Lithium-ion BESS, 4-hour discharge
Development Stage	T1
Projected Start	Q4 2026 (subject to PJM interconnection study completion)
Value Target	600 MWh discharge capacity; est. 85,000 MWh/yr grid services
Source Quality	SQ1 / SQ2
Most Recent Source	2026-02-14
Staleness Flag	FRESH
Generated	March 17, 2026 — 2:57 PM
Scoring Profile	Scoring Profile: Utility-Scale Energy — Standard Mode. This score reflects prioritization of grid readiness, policy environment, and developer track record in addition to standard baseline factors.

3 SIGNAL ANALYSIS

SIGNAL TYPE	TIER	DETAILS
Interconnection Application	T1	PJM Queue ID PJM-2026-0047 — 150 MW, York County PA, filed January 2026
Regulatory Procurement Deadline	T1	PA Act 129 Phase IV filing due April 2026 — triggers utility procurement cycle
Developer Track Record	T2	Constellation has completed 8 BESS projects in PJM; 3 in PA in past 36 months
Federal Incentive Eligibility	T2	York County confirmed energy community — 40% total ITC available under IRA
Land Control Signal	T2	York County recorder shows option agreement on 85-acre parcel, recorded Dec 2025

4 REGULATORY ENVIRONMENT

Pennsylvania operates under a strong clean energy mandate framework. Act 129 Phase IV, signed into law in 2024, requires Pennsylvania's electric distribution companies to achieve cumulative energy savings targets with a hard compliance filing deadline of April 30, 2026. This creates a well-defined procurement window that anchors the Why Now case for Keystone Ridge. On the federal side, FERC Order 841 mandates that RTOs including PJM must allow storage resources to participate in all markets. PJM's EMAAC zone (the capacity zone covering York County) has cleared at above-average RPM prices for five consecutive delivery years, supporting project financial viability. The interconnection application is subject to PJM's three-phase study process; current queue data suggests a 12–18 month study timeline before a definitive interconnection agreement is issued. Regulatory risk is rated LOW-MODERATE. The primary risk is interconnection queue delay — PJM has implemented queue reform under FERC Order 2023, which should improve study timelines for projects like Keystone Ridge that enter after the reforms take effect.

5 FINANCIAL RISK ASSESSMENT

FACTOR	ASSESSMENT	RISK LEVEL
Interconnection Cost	PJM network upgrade costs for 150 MW BESS in EMAAC estimated \$8–22M; final figure determined at end of Phase 3 study	Moderate
IRA ITC Timing	30% + 10% energy community adder confirmed; prevailing wage and apprenticeship requirements must be met for full credit — well within Meridian's existing compliance infrastructure	Low
Lithium-ion Supply Chain	Cell lead times currently 9–14 months; early procurement commitment required if Q3 2026 EPC award; potential 5–8% cost escalation risk	Moderate
PJM Capacity Market Price Risk	RPM clearing price for 2028/29 delivery year not yet set; historical EMAAC zone performance provides reasonable downside floor	Low
Developer Creditworthiness	Constellation Energy is investment-grade rated (BBB+/Baa1); payment risk is minimal	Low

6 COMPETITIVE LANDSCAPE

The EPC market for utility-scale BESS in PJM is competitive. Three firms are known to have active relationships with Constellation's Mid-Atlantic development team based on prior project announcements. However, none have publicly announced EPC pre-qualification for Keystone Ridge specifically.

COMPETITOR	PROFILE	COMPETITIVE RISK
Burns & McDonnell	Full-service EPC with active PJM BESS portfolio; completed 2 Constellation projects in 2024–25	HIGH — established incumbent relationship
Mortenson Energy	Aggressive BESS EPC expansion in Mid-Atlantic; strong safety record and union labor relationships	MODERATE — active in PJM but no confirmed Constellation relationship
Fluor Energy	Large-cap EPC; strong on IRA compliance documentation; higher overhead cost structure	MODERATE — likely bidder but price-disadvantaged vs. mid-tier EPCs

7 IDENTIFIED CONTACTS

PRIORITY	NAME	TITLE	ORGANIZATION	CONTACT / NOTES
P1	Sarah Wentworth	VP of Development, Mid-Atlantic	Constellation Energy Development	linkedin.com/in/sarahwentworth-energy — led last 3 PA storage projects
P2	Marcus Delano	Director of Engineering & Procurement	Constellation Energy Development	linkedin.com/in/marcusdelano — controls EPC vendor selection
P3	Contact not identified	Project Finance Lead	Constellation Energy Development	Recommend LinkedIn outreach to Project Finance Director at Constellation

8 INCENTIVE MAP

INCENTIVE	PROGRAM / SOURCE	EST. AMOUNT	NOTES
IRA Section 48 ITC	Inflation Reduction Act — Standalone Storage	30% base + 10% energy community adder	York County qualifies as energy community per IRS Notice 2023-29
PA Act 129 Phase IV	Pennsylvania PUC Energy Efficiency & Conservation	Demand response revenue: est. \$2.1M/yr	Phase IV filing deadline April 2026 — creates procurement urgency
PJM Capacity Market (RPM)	PJM Reliability Pricing Model	Est. \$45–65/MW-day clearing price	EMAAC zone historically clears above RTO average

9 REVENUE MODEL

Revenue estimate is based on a full EPC scope for 150 MW / 600 MWh BESS installation including civil, structural, electrical, procurement, commissioning, and SCADA integration. Three scenarios are modeled based on scope assumptions and competitive margin dynamics.

SCENARIO	SCOPE ASSUMPTION	EST. UNIT COUNT	REVENUE ESTIMATE
Base Case	Full EPC, 150 MW / 600 MWh, standard margin	600 MWh installed capacity	\$1.8M – \$2.2M
Upside	Full EPC + O&M; contract, year-1 commissioning bonus	600 MWh + 3-yr O&M;	\$2.4M – \$2.8M
Downside	Partial EPC (civil + electrical only); procurement self-performed by owner)	Partial scope	\$900K – \$1.3M

10 WHY NOW

Constellation filed an interconnection application with PJM for this site in January 2026 (Queue ID PJM-2026-0047), and Pennsylvania's Act 129 Phase IV compliance filing due April 2026 creates a defined procurement window. RFP responses are expected by Q3 2026 — EPC pre-qualification outreach should begin immediately.

11 RECOMMENDED NEXT STEPS

PRIORITY	ACTION	TIMELINE	OWNER / CONTACT
1	Send LinkedIn connection request + introductory note to Sarah Wentworth	Today	Meridian Account Manager
2	Draft EPC pre-qualification package (capability statement, safety record, IRA compliance summary, reference projects)	This week	Meridian BD Lead + Proposals Team
3	Confirm cell supplier LOI availability for 600 MWh commitment	Within 5 business days	Meridian Procurement Director
4	Schedule follow-up call with Marcus Delano (Director of Engineering)	Within 2 weeks	Meridian Account Manager
5	Monitor PJM queue for study completion notice (Queue ID PJM-2026-0047)	Monthly cadence	Meridian Market Intelligence

ASSUMPTION NOTICE: Revenue estimates and risk ratings marked [ASSUMPTION] are based on incomplete public data. Actual values may differ materially. Verify all estimates before committing resources or making outreach decisions. ArcReact v4.4 | www.arcreact.com