Project Readiness Evaluation (PRE) Analysis

Data-Driven Decision Making for Floating Solar Development

The Project Readiness Evaluation (PRE) is an early-stage feasibility assessment designed to determine whether a project should advance and under what conditions. Conducted at the front end of development, the PRE evaluates site characteristics, permitting considerations, interconnection requirements, and constructability factors to identify material risks before significant capital is committed. By surfacing environmental, regulatory, structural, and grid-related constraints early, the PRE reduces uncertainty and informs disciplined go/no-go decisions.

Beyond risk identification, the PRE supports technical and financial optimization. By integrating precise site data from water-surface mapping for floating arrays to detailed load and utility offset modeling the evaluation helps right-size the system, clarify upgrade requirements, and align scope with real-world development conditions. The result is a project defined by data and practical constraints, positioned for reliable budgeting, EPC pricing, and informed investment decisions.

PRE vs EPC: Knowing the Difference

Category	PRE (Project Readiness Evaluation)	EPC (Engineering, Procurement & Construction)
Purpose	Assess feasibility, define scope, and reduce development risk	Finalize design and construct the project
Pricing	Develop informed cost estimates based on site-specific analysis	Commit to contractual pricing and delivery terms
Primary Outcome	Defined scope, risk profile, and budget framework	Completed, operational asset

Service Tier Overview

PRE-Lite (Rapid Screening): Best for early identification of material risk, desktop site mapping, and preliminary production modeling.

PRE-Basic (Dev Readiness): Adds mooring/anchoring analysis, environmental/avian assessments, and a permitting matrix.

PRE-Plus (Technical Scoping): The most comprehensive tier. Includes Bathymetry surveys, 30% design drawings, and stamped single-line diagrams for utility interconnection application submission.

Foundational Deliverables (All Tiers)

PVSyst Modeling: Bankable energy production reports.

Financial Analysis: 30% accuracy cost breakdowns for equipment and labor.

Evaporation Savings: Quantifying the unique water-loss reduction benefits of floating solar.

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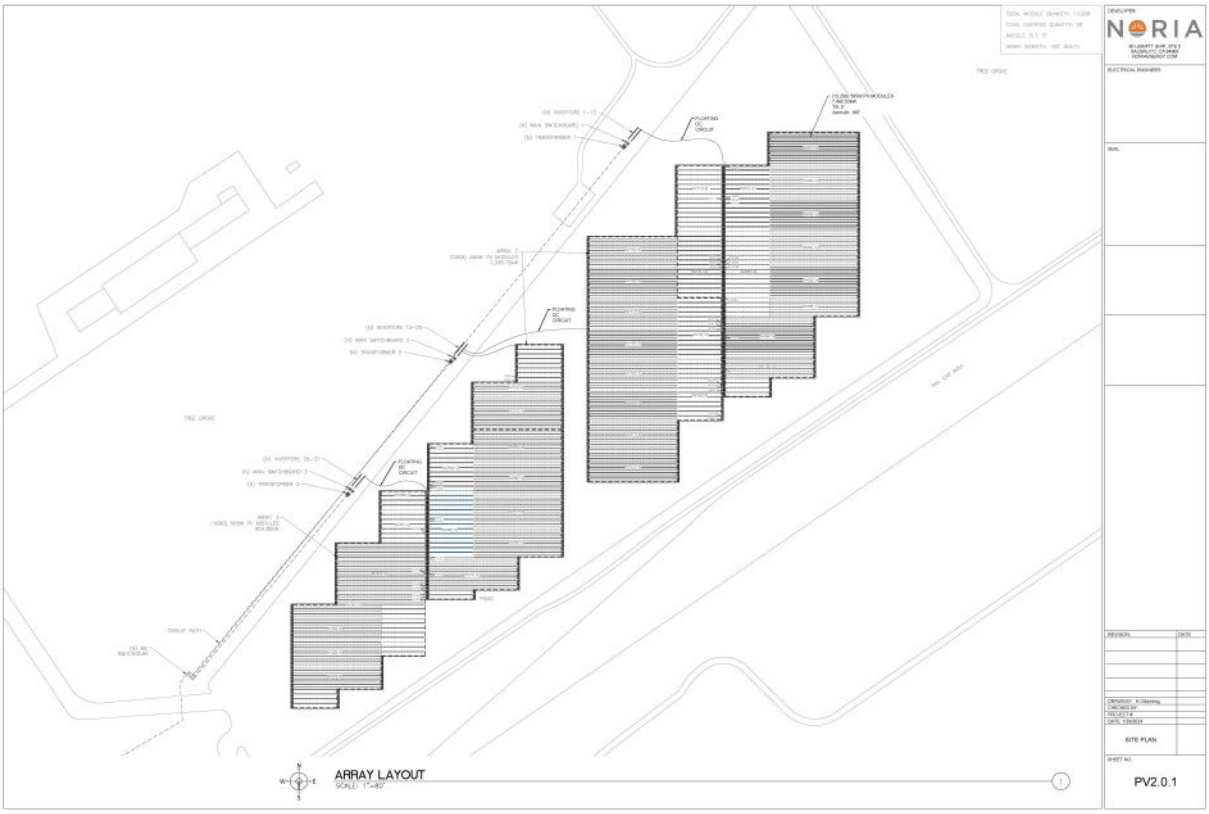
Pre-Development Service Tiers

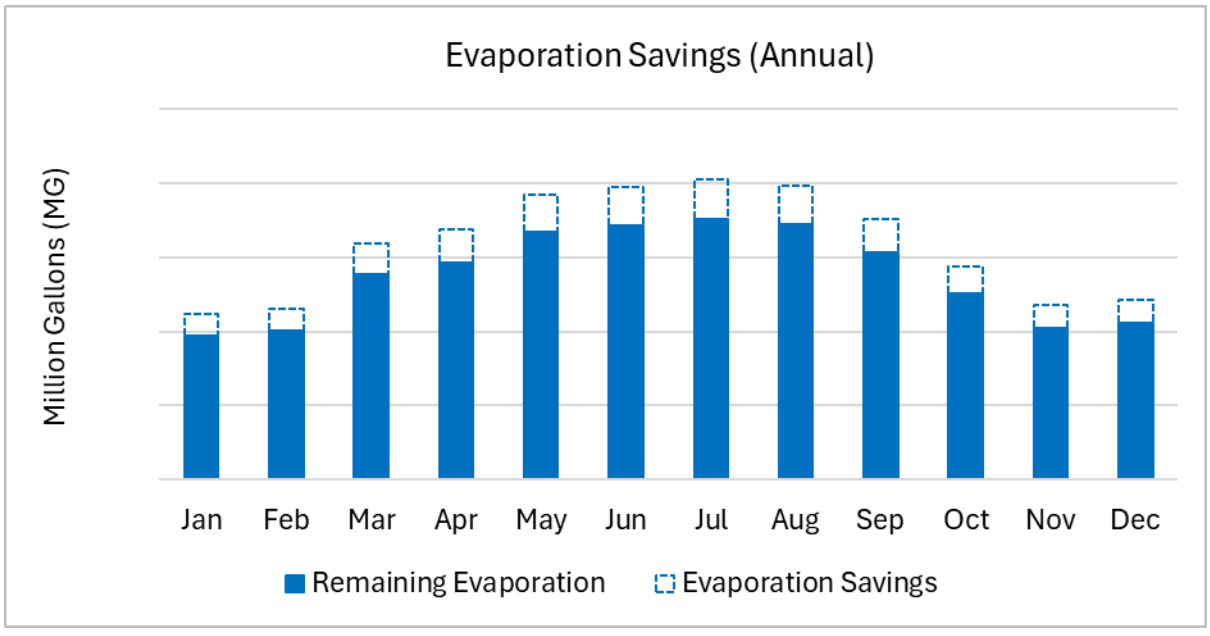
PRE-LITE: Rapid Site Screening	PRE-BASIC: Dev Readiness	PRE-PLUS: Technical Scoping
Focus: High-level "Fatal Flaw" analysis using existing data.	**Focus:** Intermediate tier adding environmental and physical site considerations.	**Focus:** The most comprehensive tier for advanced project stages.
Includes:	**Everything in Lite, plus:**	**Everything in Basic, plus:**
• **Desktop Site Analysis:** Use public and customer-supplied information to estimate constructible area, points of interconnection, and fatal flaws. • **10% Conceptual Design:** High-level layout and electrical single line drawing. • **Production Modeling:** Production modeling (MWh) using PVSyst, a bankable, industry-standard PV modeling software. Analyze optimal panel tilt and orientation. • **Financial Analysis:** Cost breakdown for conceptual design, including all equipment, development costs, construction and labor costs. Power purchase and other financing options are also provided. Includes savings analysis based on utility bills. **Optional Add-ons:** • **Preliminary Interconnection Strategy:** We will submit a pre-application to the utility to confirm feeder/substation capacity for the proposed FPV system. This identifies immediate infrastructure constraints and potential upgrade requirements. • **Peak Demand and Energy Storage Analysis:** Customer provides Utility API access (15-min data); we deliver an FPV + BESS analysis covering peak demand charges, shaving, and rate arbitrage.	• **Mooring & Anchoring:** Narrative comparing options based on site-specific liners, berms, and operations. • **Environmental & Avian Assessment:** Analysis of water quality and ecological impacts, including bird management. • **Evaporation Savings:** Quantifying the annual water-saving benefits of the floating array. • **Permitting Matrix:** Overview of applicable agencies, timelines, and costs.	• **30% Design Detail:** Updated design with specific details on cabling, electrical equipment, and anchoring. • **Bathymetry Survey:** Topographical survey of the water body to guide array placement. • **Silt Management:** Analysis of dredging requirements and panel cleaning plans. • **Stamped Single Line:** Electrical single line stamped by a licensed engineer for utility submission. • **Permitting Scoping:** Direct meetings with AHJs to refine study requirements.

Feasibility Sample

Conceptual Design



Water Savings Analysis



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