

ATAP WATER CO. LLC

ATLANTIS™

Turning Data Center Waste Heat Into Water Infrastructure

A patent-pending thermal sink + atmospheric water platform designed for hyperscale data centers, defense installations and mission-critical infrastructure.



200,000+ GPD

Modeled water output at scale

10 MW

Dedicated solar PV baseline

\$35M

Preliminary baseline facility CAPEX

The Investment Thesis

ATLANTIS is designed to turn a growing infrastructure liability into a new utility asset.



Water constraint is becoming a data-center constraint

Large AI and hyperscale facilities can place significant pressure on municipal water supply and wastewater systems.



Waste heat is an underused resource

ATLANTIS is designed to intercept low-grade server heat and use it to drive atmospheric water generation.



The customer avoids upfront infrastructure CAPEX

ATAP proposes a Cooling-as-a-Service (CaaS) model delivered through a ring-fenced project SPV.



Designed around compute uptime first

Water production is secondary to thermal protection, with isolated loops and fail-safe bypass architecture.



The same platform extends beyond hyperscale

Defense and remote mission-critical operations provide additional deployment pathways.

The Hyperscale Water-Energy Bottleneck

Large AI facilities strain water supply while rejecting heat that largely goes unused.



Cooling-water pressure

300–500K gal/day

per typical 100 MW AI data center

A typical 100 MW hyperscale AI data center can consume approximately 300,000–500,000 gallons of potable cooling water per day through evaporative cooling systems.



Municipal dependence

Curtailment risk

drought · caps · wastewater charges

Drought, curtailment, contamination events, volumetric caps and rising wastewater charges can create operational and permitting risk.



Unrecovered heat

131–149°F

(55–65°C) low-grade heat rejected

Data-center cooling loops can reject low-grade heat in the range of roughly 131°F–149°F (55°C–65°C), creating a potential thermodynamic input for ATLANTIS.

ATLANTIS is positioned as water + thermal infrastructure for high-density compute — not as another stand-alone AWG machine.

ATLANTIS: The Integrated Solution

Water, heat and power engineered as one modular platform.



Thermal sink interface

Centralized plate heat exchangers intercept facility heat while keeping the data-center loop physically isolated from the ATLANTIS process loop.



Liquid-desiccant AWG

Ambient humidity is captured in a closed-loop liquid desiccant absorption cycle and regenerated using intercepted thermal energy.



Dedicated solar + microgrid

A baseline 10 MW solar PV system is intended to power balance-of-plant loads and reduce dependence on municipal grid power.



Modular deployment

Skidded / containerized modules are designed for parallel scaling, site erection and integration with utility manifolds.



Product-water treatment

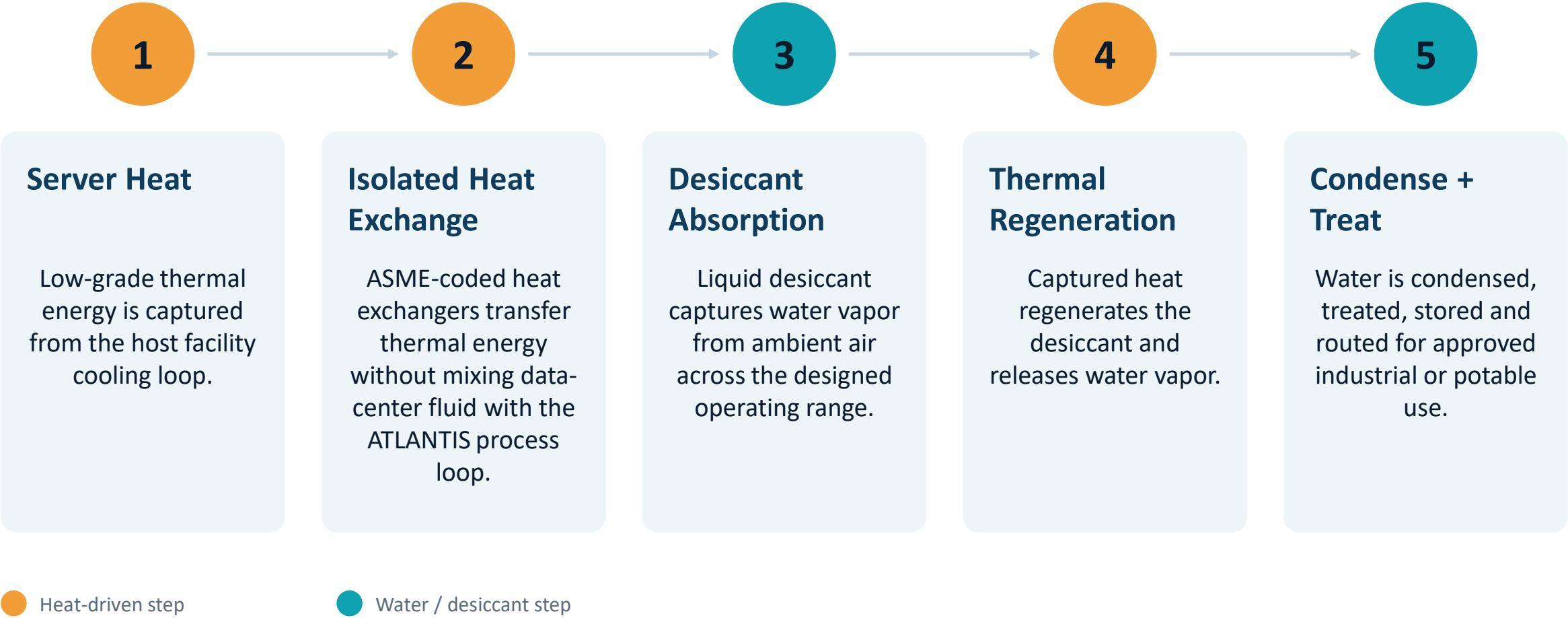
Multi-barrier filtration, UV-C disinfection and mineralization; final compliance claims depend on project-specific certification and permitting.



Water + thermal infrastructure for high-density compute.

How ATLANTIS Works

One closed-loop concept connecting compute heat, ambient moisture and on-site water production.



Safety Architecture: Compute Uptime First

Water production is secondary to thermal protection — by design.



<500 ms

design target for bypass response

**Water production can fail
without allowing the data
center's cooling requirement to
fail.**



Physical isolation

Plate heat exchangers separate host data-center fluid from the liquid-desiccant process loop.



Passive fail-safe philosophy

Spring-return default-open bypass architecture is intended to redirect coolant to backup cooling upon specified fault conditions.



Sub-second design target

Design targets bypass response within 500 milliseconds; to be presented as verified only after commissioning and test evidence exist.



MIL-STD-882E-based safety discipline

Hazard tracking, subsystem hazard analysis and FMECA methodologies are incorporated into the engineering approach.



Priority hierarchy

Compute thermal protection takes priority over water production in all operating scenarios.

Fail-Safe Architecture & IP Moat

Core architecture protecting compute uptime — with a service-financed deployment model.



<500 ms

bypass response design target

Physical isolation and a default-open bypass prioritize data-center cooling continuity over water production.

1

Physically isolated interface

Plate heat exchangers recover server waste heat while separating host cooling fluid from the ATLANTIS process loop.

2

Hardwired fail-safe bypass

Spring-return, default-open bypass is designed to redirect coolant to backup evaporative cooling upon defined faults.

3

Sub-500ms response target

The bypass architecture targets a response under 500 milliseconds; independent commissioning evidence remains pending.

4

Cooling-as-a-Service (CaaS)

Proposed project-SPV financing is intended to eliminate upfront ATLANTIS facility CAPEX for the host, subject to final terms.

5

Patent-pending integration

The isolated thermal interface and fail-safe architecture are core design differentiators; patent claim scope remains subject to confirmation.

Development & Validation Roadmap

Building ATLANTIS from engineered concept toward validated, financeable infrastructure.

Workstream	Completed / Established	Next Validation Step
IP & corporate readiness	Patent applications filed around core desiccant and thermal-sink concepts; SAM.gov active; CAGE Code 12NS3.	Confirm filing status, application numbers, claim scope and registration evidence in diligence room.
Engineering foundation	Safety-led architecture, liquid-desiccant AWG concept, thermal integration and fail-safe bypass approach defined.	Advance engineering maturity toward FEED / 30% / 60% gates and confirm equipment sizing.
Commercial structure	CaaS / SPV framework established; initial focus on hyperscale AI and data-center infrastructure.	Validate anchor offtake structure, customer payment model, service term and performance requirements.
Technical validation	Performance targets and subsystem assumptions identified.	Add independent engineering review, vendor validation, pilot evidence or defined validation pathway.
Deployment pathway	Baseline facility concept and capital framework prepared.	Confirm host-site path, EPC/vendor inputs, project schedule and bankable cost basis.
Investor readiness	Investor-facing narrative and capital stack framework prepared.	Finalize return model, CAPEX basis, risk register and diligence materials before formal investment diligence or financing commitments.

Final sequencing will reflect engineering validation, host-site requirements and commercial partner engagement.

Commercial Beachhead

Start with the environments where water constraint, heat load and uptime risk overlap.

PRIMARY BEACHHEAD



Hyperscale / AI Data Centers

Water-constrained facilities, high-density compute, large thermal loads, permitting pressure and water-positive commitments.

STRATEGIC ADJACENCY



Defense / Federal

Mission-critical sites requiring resilience, reduced dependence on municipal supply and safety-led infrastructure.

EXPANSION PATHWAY

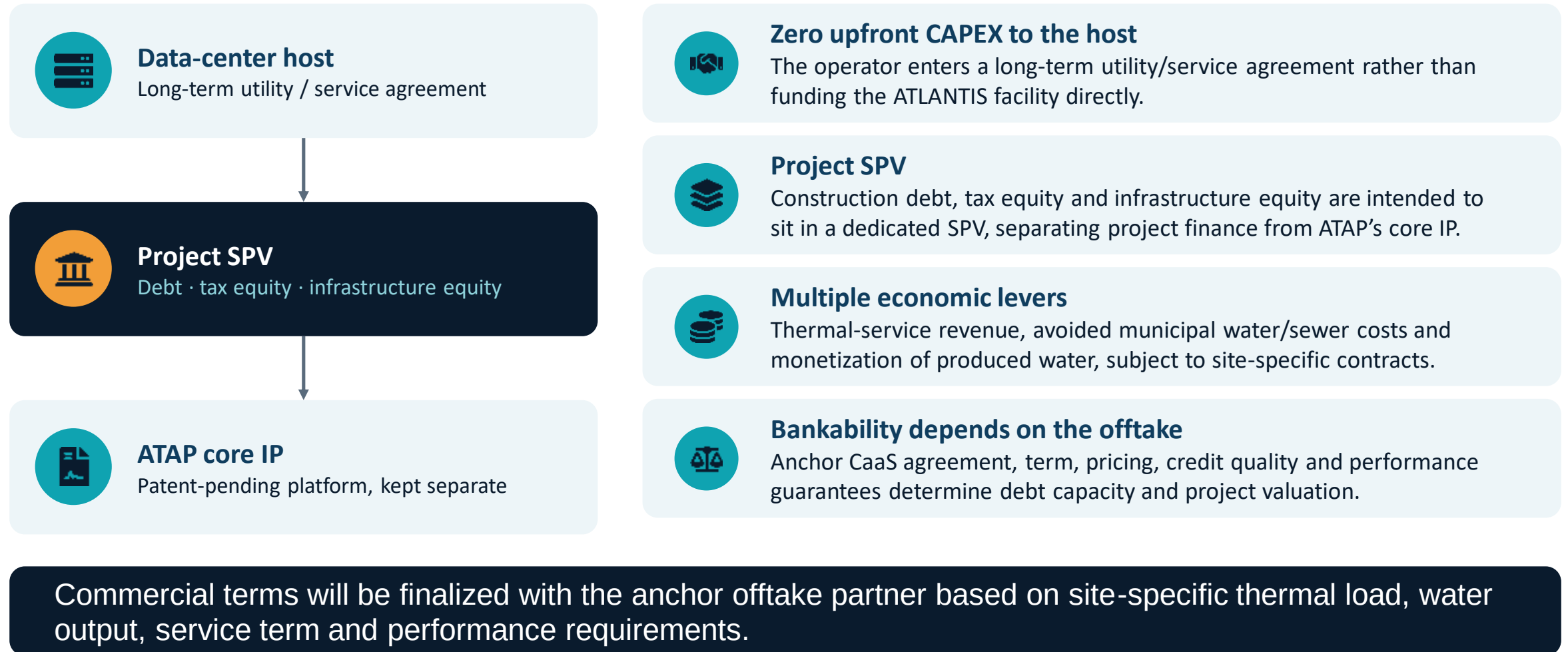


Remote Operations

Industrial and remote sites where water logistics, energy independence and infrastructure scarcity create high operating costs.

Commercial Model: Cooling-as-a-Service

Delivered through a ring-fenced project SPV, with no upfront infrastructure CAPEX for the customer.



Preliminary Facility Economics

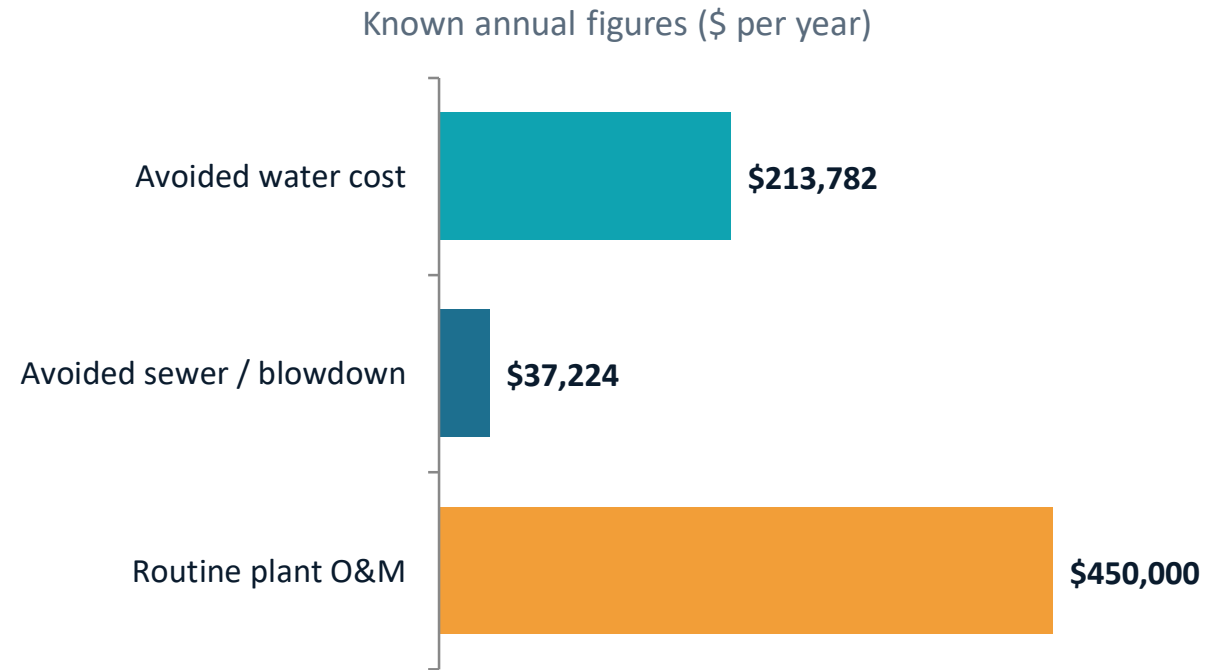
San Antonio 10 MW concept — preliminary planning assumptions; CaaS revenue, OPEX and investment returns remain unvalidated.

200,000+

GPD modeled water production

~73M

gallons per year



UNDER VALIDATION

CaaS revenue

Anchor pricing pending

Produced-water revenue

Site-specific water economics

Facility EBITDA / cash flow

After validated revenue & OPEX

Project IRR / Equity IRR

After capital stack is confirmed

Payback / DSCR

After debt/offtake terms

Capital Efficiency & Clean-Energy Incentives

Illustrative solar incentive sensitivity only; not committed capital. Eligibility, rate and tax basis require project-specific legal and tax review.

ILLUSTRATIVE SOLAR BASIS

\$10.5M

solar / microgrid budget

× 30%

Section 48E rate if wage & apprenticeship requirements are met

≈ \$3.15M

illustrative credit only; not secured funding



Section 48E credit

Clean Electricity Investment Credit for qualifying facilities and storage placed in service after December 31, 2024.



Potential 30% rate

Reachable if prevailing-wage and apprenticeship requirements are met; domestic content or energy community bonuses may add.



Tax & depreciation

MACRS and other benefits to be modeled by project tax counsel against final asset classification and placed-in-service structure.



Conservative presentation

All incentive values are subject to project-specific qualification, tax counsel and then-current law.

Basis: IRS guidance on Section 48E, which replaces the generic Section 48 reference for post-2024 facilities.

Preliminary Facility CAPEX Framework

\$35.0M planning basis for the baseline 10 MW concept; subject to FEED, vendor pricing and site-specific engineering.



	10 MW Solar PV & Microgrid	~10.50M	30%
	Liquid Desiccant Regeneration & Contactor Skids	~9.80M	28%
	Thermal Intercept, Heat Exchangers & Fail-Safe Bypass	~5.25M	15%
	Water Condensation, Storage & UV Post-Treatment	~4.20M	12%
	Site Civil, ISO Enclosures & Balance of Plant	~3.50M	10%
	Controls, Safety Validation & EPC Commissioning	~1.75M	5%

Current figures are planning allocations rather than final EPC pricing. Final project CAPEX will be established through engineering maturity, site conditions, vendor quotations and procurement strategy.

Structural Moat

Where ATLANTIS's defensibility is intended to come from.



Patent-pending integration

IP centers on liquid-desiccant AWG, concentration restoration and a dedicated data-center hydronic thermal-sink interface.



Thermal + water value stack

Solves two infrastructure problems together rather than selling water generation as a stand-alone appliance.



Off-grid balance-of-plant strategy

Dedicated solar is intended to reduce facility dependence on grid electricity for auxiliary loads.



Safety-led integration

Isolated fluid loops, passive fail-safe bypass and a compute-first uptime philosophy.



Federal procurement readiness

ATAP reports active SAM.gov registration and CAGE Code 12NS3.

Key Defensibility Factors

- Patent claim scope
- System-level integration
- Safety architecture
- Replicability
- Performance validation
- Commercial switching cost

Illustrative Capital Structure & Deployment Roadmap

Potential financing pathways for the ~\$35M conceptual facility; no financing allocation is committed or independently validated.



Why ATAP / Why Now

ATLANTIS sits at the intersection of three accelerating infrastructure needs:



More compute density and more heat to reject.



Greater scrutiny of municipal water use and resilience.



Demand for infrastructure that can be financed as a service rather than as customer-owned CAPEX.

ATAP Water Co. LLC

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SAM.gov Active | CAGE Code 12NS3



Moreno Valley / Inland Empire, California