

HEAT

VOLITION'S POSITION

Volition's position on heat is that it is a real physical question deserving numbers, not reassurance. The facility rejects about 553 megawatts of heat to the air at full load, and we said so publicly before anyone made us. What the record shows is that the heat leaves from low-level equipment and disperses in canyon airflow. Phoenix data centers have shown that the rejected heat becomes undetectable to instruments beyond about a third of a mile. Because the Planning Commission asked for proof rather than analogy, a site-specific thermal study is committed as a development-agreement condition, published before operation.

QUESTIONS & ANSWERS

1. "Will it make my neighborhood hotter?"

The site-specific thermal study will answer that at real distances before operation. The closest measured analog, four operating Phoenix data centers, found up to +4°F right at the fence and nothing detectable past about a third of a mile (air temperature).

Ref: Sailor, Abolhassani & Martin, ASME J. Eng. Sustainable Buildings & Cities, May 2026 · Planning Commission Aug 5 2026

2. "How hot does the site itself get?"

Exhaust leaves the fuel-cell modules hot, roughly 350–380°C at the outlet, like any industrial exhaust, and disperses at the equipment; air leaving the dry coolers is tens of degrees above ambient, not hundreds. Fence-line temperatures come from the thermal study.

Ref: Bloom Energy Server 6.5 datasheet · committed thermal study (development-agreement condition)

3. "Where does all that heat actually go?"

About 553 MW thermal at full load, roughly half from fuel-cell exhaust, half from the dry coolers that cool the computers, released to the air from low-level equipment and mixed by canyon airflow; a small share (3–5%) is recovered to run cooling.

Ref: Volition system heat balance, Aug 2026 (published with the application)

4. “Is 250 MW of heat really ‘light industrial’?”

That’s exactly why the Planning Commission required a formal heat study: it’s being completed and published, not asserted, and it is committed as a development-agreement condition, not a favor.

Ref: Planning Commission Aug 5 2026 motion

5. “Heat plus our fires plus our summers, why add any?”

Built-up areas already run 1–7°F warmer than open land (EPA). The study will put this site’s number at real distances; the closest measured analog shows nothing detectable beyond a third of a mile.

Ref: EPA Reducing Urban Heat Islands compendium · ASME 2026 benchmark

6. “What about the hottest days of the year?”

The cooling plant is sized for full load at design ambient above 100°F, the same worst-case summer condition as the thermal study models, because that’s when the question matters.

Ref: Engineering design case (with the application) · committed thermal study

7. “Will the heat hurt the river or the trail corridor?”

There is no thermal discharge to any natural water body, heat goes to air from low-level sources, and the thermal study quantifies air temperatures at the river corridor specifically.

Ref: Committed thermal study scope · system heat balance, Aug 2026

8. “Will the heat study be done before or after you’re approved?”

The total heat figure is public now (~553 MW thermal). The site-specific dispersion study follows final mechanical design and is delivered before operation, as a development-agreement condition; the Commission required it and we’ve committed to it.

Ref: Planning Commission Aug 5 2026 motion · development-agreement condition