Filed
Supreme Court of New Mexico
9/1/2026 11:07 AM
Office of the Clerk

In the Supreme Court
of the State of New Mexico

No. S-1-SC-41579

NEW ENERGY ECONOMY,
PETITIONER,
v.
THE SECRETARY OF THE ENVIRONMENT, JAMES KENNEY, AND HIS DESIGNEE, JOHN RHODERICK, NEW MEXICO ENVIRONMENT DEPARTMENT, AND HEARING OFFICER, MAX SHEPHERD,
RESPONDENTS,

REGARDING:
THE APPLICATION OF YUCCA GROWTH INFRASTRUCTURE, LLC FOR AN AIR QUALITY PERMIT NO. 10883
AQB 26-57

Regarding: The Application of Yucca Growth Infrastructure, LLC for Air Quality Permit No. 10883 (AQB 26-57)

APPENDIX IN SUPPORT OF RESPONSE OF YUCCA GROWTH INFRASTRUCTURE, LLC IN OPPOSITION TO EMERGENCY REQUEST FOR A STAY OF PROCEEDINGS AND VERIFIED PETITION FOR WRIT OF MANDAMUS

VOLUME I OF III

Christopher G. Michel*
Rex W. Manning*
KIRKLAND & ELLIS LLP
1301 Pennsylvania Avenue, N.W.
Washington, DC 20004

Edward Ricco
Jocelyn Drennan
RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.
201 Third St. NW, Suite 2200
Albuquerque, NM 87102
Telephone: (505) 765-5900

Counsel for Real Party In Interest Yucca Growth Infrastructure

(Additional Counsel Listed on Inside Cover)

August 31, 2026

Jennifer Bradfute
Bradfute Sayer, P.C.
125 Lincoln Ave.
Suite 222
Santa Fe, NM 87501

J. Matthew Rice*
KIRKLAND & ELLIS LLP
150 Third Street S.
Nashville, TN 37201

Jeremy Fielding*
John Fraser*
Max Gordon*
KIRKLAND & ELLIS LLP
4550 Travis Street
Dallas, TX 75205

Laila M. Kassis*
KIRKLAND & ELLIS LLP
601 Lexington Avenue
New York, NY 10022

** Pro Hac Vice Pending*

Appendix	Description	Appendix Page Number
1	July 20, 2026 YGI Request for Emergency Status Conference	APP 1
2	July 24, 2026 CBD-NMELC Request for Discovery on YGI	APP28
3	July 27, 2026 NEE Request	APP40
4	July 28, 2026 NEE Request	APP107
5	July 29, 2026 Order re Emergency Conference	APP122
6	July 31, 2026 YGI Response to Requests to Order Discovery	APP126
7	August 3, 2026 Maxwell Motion for Expedited Prehearing Disclosures	APP139
8	August 4, 2026 NEE Motion to Dismiss Application (Ex A)	APP173
9	August 7, 2026 Applicant Consolidated Response to Maxwell-NEE-CBD Discovery	APP188
10	August 10, 2026 Sua Sponte Order	APP208
11	August 11, 2026 Order re Maxwell Motion for Discovery	APP213
12	August 12, 2026 Order re Consolidated Discovery	APP218
13	August 12, 2026 Order Denying NEE Reconsideration	APP223
14	August 14, 2026 Order Denying Motion for Reconsideration and Ordering Expedited Briefing on a Corollary Issue	APP228
15	August 3, 2026 Response in Opposition to Motion to Reset October 19 Hearing Schedule	APP234

RECEIVED
By The Office Of The Secretary at 4:34 pm, Jul 20, 2026

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF:

THE APPLICATION OF YUCCA GROWTH INFRASTRUCTURE, LLC FOR AN AIR QUALITY PERMIT, NO. NSR 10883

AQB 26-57 (P)

REQUEST OF EMERGENCY STATUS CONFERENCE[1]

Yucca Growth Infrastructure, LLC ("YGI" or "Applicant") respectfully ask for an emergency status conference. Applicant is concerned that the hearing date and post hearing deadlines are in conflict with the New Mexico Environment Department ("NMED" or the "Department") statutory requirement to issue a permit decision by November 23, 2026. Applicant respectfully asks the Hearing Officer **to set an emergency status conference on this request, as soon as possible**.

Unless the hearing is moved to the proposed earlier date, it is impossible for the Deputy Secretary of NMED to complete the required post-hearing steps and issue an order on the application before the November 23, 2026 statutory deadline (which deadline cannot be extended by law). The scheduling order does not merely risk missing that statutory deadline; it creates an unavoidable conflict with both the Air Quality Control Act and New Mexico's federally approved State Implementation Plan.

There is no legitimate need to delay the hearing until October. The scheduling order followed a July 15, 2026, scheduling conference, at which counsel for Applicant, NMED, and the

[1]YGI has hyperlinked the referenced comment letters and articles due to the size of these attachments. YGI can separately share these attachments, which would result in hundreds of pages of materials, if they need to be separately sent.

Hearing Officer indicated that they were ready to proceed to hearing the week of August 17, 2026. So, this is not a situation in which the Department lacks resources in order to complete a timely process. Several opposing parties, however, represented to the Hearing Officer that they lack sufficient time to prepare for a hearing set the week of August 17, 2026. That representation cannot be squared with the parties' own public record. As Section II details, these organizations have campaigned against this project's air permit process for more than seven months, demanded — repeatedly and in writing — the very public hearing they now claim arrived too soon, and already filed the substance of their technical case.

Applicant presses this request for a status conference with urgency because the stakes are not procedural: ***an agency ordered to follow a schedule it cannot lawfully keep is an agency ordered into non-compliance with the law it administers.*** In addition, if a permit is not issued by the November 23, 2026 statutory deadline, which date cannot be extended, Applicant will suffer the prejudice shown in the Declaration of Julia Robin, attached as **Exhibit 1**.

INTRODUCTION

This project's air permitting history began in the fall of 2025, when Acoma, LLC (a subsidiary of YGI) filed two NSR air permit applications — Permit Nos. 10732 and 10734, for the proposed East and West Microgrids. Those applications, for two natural gas-turbine projects to power a planned data center in Doña Ana County, drew organized opposition. In early 2026, YGI reconfigured its power plan to significantly reduce emissions; on April 27, 2026, Acoma, LLC withdrew its applications and YGI filed the current application, Permit No. 10883, cutting NOx emissions by 92% along with reductions in other pollutants. Opposition from the parties who have entered appearances in this case, however, carried over to the new application.

Starting the hearing on October 19, 2026 would not merely shift dates on a procedural calendar. As shown in Section I below, it will delay concrete, quantified benefits to New Mexicans and jeopardizes the Department's ability to meet its statutory deadline. An order setting a hearing date incompatible with this binding procedural timeline is invalid.

At the status conference, we ask that the Hearing Officer focus on a narrow question — one the Hearing Officer can answer without resolving any disputed issue of statutory interpretation. Setting the hearing in August, or as soon as possible in September, will provide a legally valid schedule consistent with the statutory framework. That timing will give every party the full process the regulations provide and leaves the Department with more time to decide what the opponents characterize as complex issues by its deadline. Setting the hearing in late October, by contrast, will provide the same process but make it impossible for the Department to reach a considered, valid decision by the statutory deadline.

I. THE SCHEDULING ORDER SHOULD PRESERVE THE DEPARTMENT'S ABILITY TO ISSUE A FINAL DECISION BY THE NOVEMBER 23, 2026 DEADLINE, WHICH CANNOT BE EXTENDED.

A. The Secretary Has Already Granted the Maximum Extension Allowed.

The Department determined the application administratively complete on or about May 27, 2026 (*see* **Exhibit 2**). That determination commenced the 90-day period under NMSA 1978, Section 74-2-7(B)(2)(a) and 20.2.72.207(B)(1) NMAC and set an original final-action deadline of August 25, 2026. On July 1, 2026, Secretary Kenney notified the Applicant in writing that an extension was required, specified the grounds, and granted the full 90-day extension permitted by Section 74-2-7(B)(2)(a) and 20.2.72.207(C) NMAC (*see* extension letter and Hearting Determination in **Exhibit 3**). The final-action deadline is now November 23, 2026, which cannot be extended.

On July 2, 2026, the Secretary issued the Notice of Docketing, Appointment of Hearing Officer, and Delegation of Final Decision Authority (*see* **Exhibit 4**). That notice delegated the procedural powers arising under Part 20.1.4 NMAC to the Hearing Officer and delegated the merits and dispositional issues to the Deputy Secretary. At the July 15, 2026 scheduling conference, YGI and the Department both advocated for a public hearing the week of August 17–21, 2026. Opponents argued that Section 74-2-7(B)(3) permits the schedule to run past the statutory deadline so long as the Department thereafter notifies the Applicant. As shown below, that interpretation is not correct — particularly where the Department has indicated that it is ready, willing, and able to hold the hearing in August and complete the post-hearing steps by November 23, 2026.

B. The Post-Hearing Steps Require an August or Early September Hearing.

Holding a hearing before November 23, 2026 is not enough time to comply with the statute; every post-hearing step must also be completed by that date. Under Part 20.1.4 NMAC, those steps include the filing of the transcript; the parties' proposed findings and closing argument; the Hearing Officer's report; a 15-day period for party comments on that report (unless the scheduling order or an order from the Secretary sets a shorter one); any oral argument allowed on the report; and the final order. 20.1.4.500(A)–(D) NMAC. All of this must occur within the 90-day extension the Secretary granted under Section 74-2-7(B)(2)(a) and 20.2.72.207(C) NMAC — that is, by no later than November 23, 2026.

A hearing set for the week of October 19, 2026 makes compliance with that deadline impractical. That prospect should concern every participant in this proceeding, the public, and the Department most of all. The statutory deadline is not the Applicant's private entitlement; it is the Legislature's binding command to the Department, and a schedule that forecloses compliance

leaves the Department no path to follow it. As proposed, the hearing would not commence until 55 days — 61% — of the extension period had passed. That schedule consumes nearly two-thirds of the time window before any evidence is heard. By contrast, a hearing by the week of August 24, 2026 would conclude with nearly three months remaining for the transcript, proposed findings, the Hearing Officer's report, party comments, and the Secretary's final order.

When one available schedule preserves every procedural protection the regulations afford and permits compliance with the Legislature's timetable, and the other forecloses compliance while adding nothing the rules require, sound administration favors the former. Nothing in the record demonstrates that an October hearing is necessary to protect any party's rights. Every participant (the parties, the Department, the public, and any reviewing court or regulatory body) benefits from a record free of avoidable deadline questions. The question before the Hearing Officer, in short, is not whether a reviewing court would ultimately invalidate a permit issued after November 23, 2026; it is whether to adopt, knowingly, a schedule that creates a procedural impossibility when selecting a slightly earlier hearing date affords every party full protection **and** preserves the Department's ability to meet the Legislature's statutorily-mandated timetable.

C. The Statute Expressly Limits the Secretary's Extension Authority.

This is not a mere scheduling inconvenience. The Legislature created strict timelines for the processing of air permit applications. Statutory interpretation begins — and where the language is clear, ends — with the plain words the Legislature chose. *See High Ridge Hinkle Joint Venture v. City of Albuquerque*, 1998-NMSC-050, ¶ 5, 126 N.M. 413, 970 P.2d 599. Section 74-2-7(B)(2) directs that board regulations shall include:

> specification of the deadlines for processing permit applications; provided that the deadline for a final decision by the department or the local agency on a construction

> permit application **may not exceed**: (a) **ninety days** after the application is determined to be administratively complete, if the application is not subject to requirements for prevention of significant deterioration, ***unless the secretary or the director grants an extension not to exceed ninety days for good cause, including the need to have public hearings*** . . . .

NMSA 1978, § 74-2-7(B)(2)(a) (emphasis added). Three features of this text control. First, the use of "may not exceed" in the lead-in creates a hard time limit for processing permit applications. Second, the Legislature expressly addressed extensions and capped them at 90 days (in this case, November 23, 2026). Where the Legislature has spoken to a subject and prescribed the manner and limit of its exercise, that prescription is exclusive.

The EIB's implementing regulation tracks the statute precisely. Rule 20.2.72.207(B)(1) requires the Department to "either grant, grant subject to conditions or deny the permit . . . within ninety (90) days after the department deems the application administratively complete." Rule 20.2.72.207(C) states:

> If the department fails to take action on the application within the deadlines specified in Subsection B of 20.2.72.207 NMAC, the department shall notify the applicant by certified mail that an extension of time is necessary to process the application and shall specify, in detail, the grounds for the extension. ***The secretary may grant an extension, not to exceed ninety (90) days, to the deadlines specified in Subsection B of 20.2.72.207 NMAC,*** if the secretary determines that good cause exists for the extension. The secretary shall notify the applicant by certified mail of the decision on the extension. If the secretary grants the extension, the notification shall include the length of the extension and the reasons therefore. ***The authority under this paragraph may be delegated by the secretary only to the deputy secretary or a division director.***

(Emphasis added). The Secretary's July 1, 2026 letter already granted the maximum 90-day extension to November 23, 2026. This date cannot be further extended ***by anyone***. The Legislature and the EIB created express time limits and a specific extension process, and both have now been exhausted. Those time limits are not merely aspirational: they are enforceable obligations of the

Department under both state and federal law.[2] A scheduling order should be the instrument by which the Department keeps those obligations — not the reason it cannot.[3]

D. Section 74-2-7(B)(3) Creates a Notice Duty, Not a Second Extension Mechanism.

At the scheduling hearing, one of the opponents relied on Paragraph (B)(3), which requires board regulations to provide "that if the department . . . fails to take final action on a construction permit application within the deadlines specified in Paragraph (2) . . . , the department . . . shall notify the applicant in writing that an extension of time is required . . . and specify in detail the grounds for the extension." From this, the opponent reasoned that the permitting deadlines are essentially elastic: thus, the Hearing Officer may set whatever schedule appears proper, and the Department need only send a letter. That reading, however, renders the Legislature's deadlines meaningless. It would allow any department employee to delay air permit applications indefinitely. The clear language of the statute rejects this argument.

Textually, Paragraph (B)(3) directs the EIB to build a notice mechanism into its regulations. It confers no freestanding authority on anyone to act beyond the Paragraph (B)(2) deadlines. It incorporates those deadlines by reference ("the deadlines specified in Paragraph (2)") and presupposes their continuing force: the written notice, with grounds "specif[ied] in detail," is

[2] The Department's duty to act within these deadlines is enforceable, and the consequences of non-compliance would not be confined to this proceeding. These deadlines are an enforceable component of the New Mexico State Implementation Plan, approved by EPA effective April 10, 2013, *see* 78 Fed. Reg. 15,296 (Mar. 11, 2013), and identified as part of the applicable implementation plan at 40 C.F.R. § 52.1620(c). Final action outside the deadlines the Secretary has now exhausted would therefore place the Department out of compliance not only with the Air Quality Control Act but with the applicable implementation plan under the federal Clean Air Act, 42 U.S.C. § 7410 — a posture carrying federal consequences of its own. Any history of non-compliance with these deadlines by NMED further compounds this issue and shows a history of non-compliance with the SIP. Non-compliance here may unnecessarily invite collateral administrative or judicial proceedings concerning the Department's administration of its permitting program — proceedings that would divert attention from the merits and that are entirely avoidable through a modest scheduling adjustment. The relief requested here provides a path for the Hearing Officer to avoid creating that risk.

[3] Furthermore, the Notice of Docketing does not delegate authority to the Hearing Officer to extend the deadlines in this case (directly or indirectly) past the 90-day extension period.

the accountability mechanism that accompanies the one capped, good-cause extension Paragraph (B)(2) permits. The EIB's implementation puts the point beyond argument. The Board adopted Paragraphs (B)(2) and (B)(3) together, in the single integrated provision quoted above — the certified-mail notice of the need for an extension, followed immediately, and only, by the Secretary's authority to grant one good-cause extension "not to exceed ninety (90) days." 20.2.72.207(C) NMAC. The notice opponents rely on is not a separate path around the deadline; it is the first step in the one extension process the statute and rule create. Notice by itself suspends nothing and extends nothing.

Opponents' contrary reading violates the settled rule that a statute must be read as a harmonious whole, with no provision rendered surplusage. *See Baker v. Hedstrom*, 2013-NMSC-043, ¶ 24, 309 P.3d 1047; *Key v. Chrysler Motors Corp.*, 1996-NMSC-038, ¶ 14, 121 N.M. 764, 918 P.2d 350. If a letter alone could carry the Department past the deadline, the two 90-day limits (one for processing a permit after a completeness determination and one additional 90-day period for an extension) would do no work at all. It would also produce an absurd result the Legislature cannot have intended: perpetual delay of any permit decision by periodic correspondence. *See Baker v. Hedstrom*, 2013-NMSC-043, ¶ 11, 309 P.3d 1047.

The New Mexico Supreme Court has enforced the same principle under this very Act — courts may not enlarge a standard that the Legislature has fixed. In *Duke City Lumber Co. v. N.M. Environmental Improvement Board*, 1984-NMSC-042, ¶ 17, 101 N.M. 291, 681 P.2d 717, the Supreme Court reversed an EIB decision where the Board "expand[ed] the statutory definition" beyond the standard the Legislature chose. The Supreme Court held that "[t]he Legislature has provided the standard . . . and this Court must adhere to it." Opponents' interpretation of Paragraph B(3) suffers from this same flaw: it uses an enlarged statutory interpretation of Department staff's

ability to extend permit timelines by adding an exception the Legislature never expressly intended. The Legislature provided an express limit on permit processing extensions. Neither the Department, the Hearing Officer, nor the opponents' gloss on Paragraph (B)(3) may expand it.

B. Opponents Will Not Be Prejudiced by Holding the Hearing Before October 19.

The opposing parties who now claim they lack time to prepare for an August hearing have actually spent months preparing for this hearing. They have filed extensive technical comments; publicly identified at least one academic expert; and published their own modeling and technical data — all of which they have made publicly available. And the same attorneys and principals now pleading lack of time have been quoted in the press analyzing the merits of Project Jupiter's air permit applications since December 2025 — including CBD counsel's statement to the Albuquerque Journal, seven months before the scheduling conference, that he "anticipated a challenge to the air quality permits." Their own submissions, and contemporaneous news coverage of their campaign, establish the timeline, which is set forth on **Exhibit 5**.

The claim of unpreparedness fails on its own record for two reasons. First, these organizations have demanded a hearing for months — across two generations of permit applications. They cannot claim prejudice from receiving the very result they spent months advocating for. Second, and more fundamentally, the technical case opponents say they need time to build is not prospective; it has largely been filed already in their comment letters. Contrary to statements made at the scheduling conference, the NEE Comment Letter shows that Ms. Nanasi is already working with at least one expert: it attaches an analysis prepared by Robert Davies, Ph.D., of Utah State University, and "incorporate[s]" Dr. Davies's curriculum vitae as Exhibit B — work product on which CBD's Comment Letter also relies. *See* CBD Comment Letter at 10 & n.30.

The stack-test theory NEE advanced at the scheduling conference has likewise already been briefed — twice. NMELC pre-briefed it on July 2, 2026, attacking the application's reliance on a single-unit test "scaled to 2,462 MW with no demonstration of representativeness at the installed scale." NMELC Additional Comment (July 2, 2026) at 10–11. CBD's Comment Letter goes further still, adding a quantitative, run-by-run critique of YGI's stack test — computed variance percentages, comparative emission factors — alongside ozone design-value and heat-flux analyses. CBD Comment Letter at 2–3.

These documented facts show organizations that assembled their arguments, analyses, and experts long ago. The procedural rules, by default, require notices of intent 14 days before a hearing; nothing in this record explains why that period would not be adequate here.

Nor can the claim of insufficient time be evaluated in the abstract, because NMED's regulations have already answered how much notice and preparation time these proceedings require. A hearing beginning the week of August 24, 2026 honors every fixed deadline the regulations prescribe. The post-completeness public notice and 30-day interest period, 20.2.72.206 NMAC, has run in full, with robust public comment and participation. A Notice of Hearing issued now would still precede an August 24 hearing by more than 30 days, as 20.1.4.200 NMAC requires. The deadline to file statements of intent to present technical testimony would fall on or about August 10, 2026 — the full 14-day regulatory period under 20.1.4.300 NMAC, and a full 35 days after opponents filed their technical comments. And the 30-day analysis-availability period of 20.2.72.206(B)(2) NMAC is satisfied by a wide margin. Due process requires a meaningful opportunity to prepare and be heard; it does not require the maximum preparation time a party might prefer. The Environmental Improvement Board (EIB) determined that these timelines are sufficient and wrote them into its rules. Applying the agency's long-established rules equally to

all parties is not a due process violation. *See Nat'l Council on Comp. Ins. v. New Mexico State Corp. Comm'n*, 1988-NMSC-036, ¶¶ 21–22, 107 N.M. 278, 284, 756 P.2d 558, 564 (notice reasonably informing the party of the matters to be addressed, with twenty-five days for preparation, "comported with procedural due process"; a party's "actual knowledge of the details to be inquired into at the hearing" further supports the conclusion that no due process violation occurred). Applicant seeks no departure from those rules. Every party retains the opportunity to present witnesses, cross-examine opposing witnesses, introduce exhibits, file proposed findings, and submit legal argument.

The Legislature's own benchmark for similar air permit hearings confirms the point. The Air Quality Control Act requires the EIB to conduct a complete merits hearing on a permit appeal — with public notice and participation — within sixty days of the petition. NMSA 1978, § 74-2-7(I). Measured against that yardstick, opponents' position is strained: by August 24, 2026, they will have had 96 days since NMELC's first written hearing demand on this application, roughly 89 days since the completeness determination, and approximately 49 days since filing technical comments that already brief the merits.

Finally, resetting the hearing for August does not require narrowing public participation, and YGI does not ask for that. YGI does not oppose reasonable measures to maximize participation within the lawful schedule — an in-person hearing in the affected community, Spanish-language interpretation, and if needed evening public-comment sessions. The choice the Air Quality Control Act's deadlines present is not between speed and participation; it is between a schedule that preserves the Department's ability to comply with the Legislature's timetable and one that unnecessarily makes that compliance impossible.

C. The October 19, 2026 Hearing Date Will Prejudice Applicant.

The prejudice from delay is not speculative. As shown in the Declaration attached as Exhibit 1, Applicant's tenant at the microgrid, Oracle America, has made plans and concrete investments in reliance on the November 23, 2026 deadline that cannot be undone without significant financial harm. As the Declaration of Julia Robin establishes, Oracle and the Applicant committed to equipment procurement, engineering, and financing in reliance on the statutory deadline that began running when the Department deemed the Application complete on May 27, 2026 — capital that now sits idle and cannot be deployed or recovered while the permit remains unresolved. Robin Decl. ¶¶ 4–5, 8(a). Approximately 1,000 construction and 1,500 operations positions cannot begin until the permit issues, and continued delay will force postponement of hiring and the loss of skilled personnel who may be unavailable if/when the permit is ultimately granted. *Id.* ¶ 8(c). The Facility was developed to serve a specific, time-limited market window for computing capacity; once that opportunity passes, it cannot be recovered even by a favorable decision on the merits. *Id.* ¶ 8(e). Critically, none of this harm is compensable: much of it is not susceptible to any reliable measure of money damages, and no damages action lies against the Department for the delay, leaving the Applicant without any adequate remedy. *Id.* ¶ 9. By contrast, no party has identified any prejudice from holding the hearing within the timeframe the Applicant and the Department originally proposed — the opponents have been engaged with this project for over seven months and have been actively preparing for this hearing. The balance of harms therefore weighs decisively in favor of amending the Scheduling Order. *Id.* ¶¶ 7, 10.

The public shares in this prejudice. Postponing the hearing delays the creation of hundreds of jobs in the near term for New Mexicans. The project will create more than 4,000 construction jobs and 1,500 ongoing project-supported jobs once construction is complete, generating $384 million in annual economic impact during construction and $113 million annually once

operational. *See* Oracle, *Oracle Launches New Campaign Highlighting Commitments to Doña Ana County* (May 26, 2026). Applicant estimates that the microgrid will be the direct source of approximately 1000 construction jobs and over 700 operations roles, and the hiring for those roles cannot commence while the application decision date remains in limbo. Every month of delay also impacts the community benefits tied to the project's progress: construction of the microgrid is projected to produce millions of dollars in Gross Receipts Taxes that will provide concrete benefits at the county and state level. Deferring construction means the full scope of those benefits will be indefinitely delayed. Opponents, by contrast, face no comparable harm: they have had the application, the Department's analysis, and their own experts' work for months. The balance of prejudice points in one direction, and the public interest in a timely hearing and decision is concrete and substantial.

CONCLUSION

The Scheduling Order is not compatible with the binding November 23, 2026 deadline and will require the Department to choose between complying with a scheduling order and complying with the law. Applicant respectfully asks the Hearing Officer to set a status conference before July 22, 2026, so that a Notice of Hearing may issue at least thirty days before an August 24 hearing. *See* 20.1.4.200 NMAC.

Respectfully submitted,

BRADFUTE | SAYER

/s/ Jennifer L. Bradfute
Jennifer L. Bradfute
David Krimse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
Email: jennifer@bradfutelaw.com

/s/ Jennifer L. Biever
Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
jbiever@williamsweese.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

CERTIFICATE OF SERVICE

I hereby certify that on July 20, 2026, a true and correct copy of the foregoing Entry of Appearance was served by email to:

Christopher Vigil Assistant
General Counsel Brian
Yardman-Frank Assistant
General Counsel
New Mexico Environment Department Office
of General Counsel
121 Tijeras Avenue NE, Suite 1000
Albuquerque, NM 87102
christopher.vigil@env.nm.gov
brian.yardman-frank@env.nm.gov
Counsel for NMED

Jennifer L. Bradfute
David Kinnse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
jennifer@bradfutelaw.com
david@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
jbiever@williamsweese.com *Counsel for Applicant Yucca Growth Infrastructure, LLC*

Jennifer L. Bradfute
David Kinnse Bradfute
Sayer, P.C.
P.O. Box 90233
Albuquerque, NM 87199
jennifer@bradfutelaw.com
david@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

Colin Cox
Gail Evans
Center for Biological Diversity
P.O. Box 31417
Santa Fe, NM 87594
ccox@biologicaldiversity.org
gevans@biologicaldiversity.org
Counsel for the Center for Biological Diversity

Mariel Nanasi
Christopher Dodd
New Energy Economy
422 Old Santa Fe Trail Santa Fe, NM 87501
mnanasi@newenergyeconomy.org
chris@fayerbergdodd.com
Counsel for New Energy Economy

Nicholas R. Maxwell
P.O. Box 1064
Hobbs, NM 88241
inspector@sunshineaudit.com
Pro Se Intervenor

Bruce Wetherbee
60 Thoreau Street #103
Concord, MA 01742
editor@thecandlepublishing.com
Pro Se Intervenor

Joe Cardillo
344 4th Street SW
Albuquerque, NM 87102
joe@progressnowum.org *Pro Se Intervenor*

Max Shepherd
max.shepherd@comcast.net
Hearing Officer

Maslyn Locke
Senior Staff Attorney Eric
Jantz
Legal Director
Tel.: (505) 989-9022
mlocke@nmelc.org
ejantz@nmelc.org
New Mexico Environmental Law
Center

Esperanza Chairez Esperanz
Chairez
esperanza@yuccamm.org
YUCCA Policy Campaign Manager

Isaiah Zemke
2300Buena Vista SE Suite 110
505-266-5875
izemke@sunwin49.org
Sheet Metal Workers Local Union No. 49

Yiwei Chen
Economic Development New Mexico
P.O. Box 20003
Santa Fe, NM 87504-5003
(505) 394-5481
yiwei.chen@edd.nm.gov

By: /s/ Jennifer L. Bradfute

STATE OF NEW MEXICO
BEFORE THE SECRETA RY OF ENVIRONMENT

IN THE MATTER OF:
THE APPLICATION OF YUCCA (P)
GROWTH INFRASTRUCTURE, LLC FOR AN AIR QUALITY PERMIT, NO. NSR 10883

AQB 26-57

DECLARATION OF JULIA ROBIN IN SUPPORT OF YUCCA GROWTH INFRASTRUCTURE'S EMERGENCY MOTION TO AMEND SCHEDULING ORDER

I, Julia Robin, state as follows:

1. I am over 18 years of age, of sound mind, and otherwise competent to make this Declaration. The factual statements set out below are based on my own personal knowledge and on business records maintained by Oracle America Cloud Services, LLC ("Oracle") that I have reviewed and that are kept in the ordinary course of Oracle's business.

2. I am the Vice President, Infrastructure Capacity and Sourcing at Oracle America, Inc., the parent company of Oracle. In that capacity, I oversee infrastructure sourcing and contracting for all new data center colocation as well as build-to-suit development projects for Oracle's customers. I am submitting this Declaration at the request of Yucca Growth Infrastructure, LLC (the "Applicant"). My duties give me direct, firsthand knowledge of the Applicant's air permit application, its construction and operating schedule, its contractual commitments, and the financial and operational consequences described below.

3. On April 27, 2026, the Applicant filed with the New Mexico Environment Department ("Department") an application for an air quality construction permit for the YGI Microgrid (the "Facility") located in Doña Ana, New Mexico (the "Application"). The Department deemed the Application complete on May 27, 2026.

4. At this time, Oracle was aware of the binding statutory deadline for the Department to issue a decision on the Application by no later than November 23, 2026.

5. Given the complexity of construction of a large infrastructure project like the YGI microgrid, Oracle began coordinating with project partners including the Applicant on construction planning, contracts with equipment vendors, and other key logistical matters even as the Application was being drafted for filing in April, and fully committed to a number of commercial obligations in reliance on the November 23, 2026 permit decision deadline once the Application was deemed complete on May 27, 2026.

6. On July 1, 2026, the Department determined that there was "significant public interest" in the Application and recommended that a public hearing would be held on the Application.

7. To my knowledge, the Applicant has at all times acted diligently in prosecuting the Application. It has timely submitted all information requested by the Department, responded to each request for additional information, and stands ready to present its case at a hearing that will allow the Department to meet its statutory deadline, i.e. the August 17, 2026 hearing timeframe proposed in its Proposed Scheduling Order. None of the delay in this matter is attributable to any act or omission of the Applicant.

8. The delay of the hearing is causing Oracle concrete, ongoing, and non-recoverable harm. Specifically:

(a) **Stalled capital project and idle investment.** Oracle has committed to entering into contracts with equipment vendors, engineering, and financing that cannot be deployed or recovered while the permit remains unresolved. To extent the hearing is at risk of delay beyond the current schedule, contractors and vendors will move on to other projects and the entire project's timetable could be pushed.

(b) **Lost and jeopardized contracts.** Oracle and Applicant have entered into gas supply, power purchase, option, and construction agreements that are contingent on certain activities commencing by December 2026. As a direct result of the delay, Oracle and the Applicant face the loss of contracts and business relationships that cannot be replaced.

(c) **Workforce impact.** Oracle and the Applicant project that there are approximately 1000 construction and 700 operations roles associated with the Facility whose work cannot begin until the permit issues. Continued delay will require Oracle and

the Applicant to postpone hiring efforts for this workforce, with a corresponding loss of skilled personnel who may not be available if and when the permit is later granted.

(d) **Expiring approvals and compliance deadlines.** The Facility depends on related permits, financing commitments, tax incentives, and contracts that cannot practically be extended. Any delay threatens the loss of corresponding permits and commitments, which cannot be restored by a later favorable ruling on the Application.

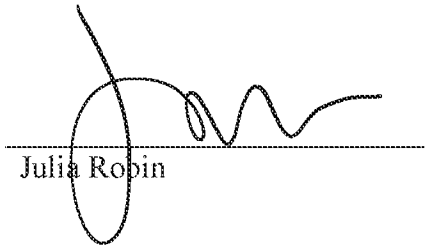
(e) **Foreclosed market opportunity.** The Facility was planned to serve a data center and specific market window, customer, and demand for computing power from the quickly moving artificial intelligence marketplace. That opportunity is time-limited and, once lost, cannot be recovered even if the permit ultimately issues.

9. The harm described above cannot be undone by a later decision in the Applicant's favor. A permit granted after contracts have been lost, the workforce has dispersed, the collateral approvals have expired, and the market opportunity has passed will not restore the Applicant to the position it would have occupied had the hearing gone forward on schedule. Much of this harm is not susceptible to any certain or reliable measure of money damages, and no action for damages lies against the Department to compensate the Applicant for the delay. The Applicant therefore has no adequate remedy for the injury the delay is inflicting.

10. Time is of the essence to the Application. When the Department deemed the Application complete on May 27, 2026, a defined statutory and regulatory period began to run within which action on the Application and any hearing were required to occur. Oracle relied on those deadlines. The delay of the hearing will extend the proceeding beyond the mandatory statutory periods Oracle understood would govern.

11. I make this Affidavit in support of the Applicant's request that the Hearing Officer reconsider his Scheduling Order and set and hold the hearing on the Application at the earliest date permitted by law and decline any further delay or extension.

I, Julia Robin, declare under penalty of perjury that the foregoing is true and correct. Executed this 17th day of July, 2026.



Julia Robin

May 27, 2026

Sent By Certified Mail

Amanda Marrufo
Operator
Yucca Growth Infrastructure, LLC
4353 North First Ave
San Jose, CA 95134

Re: Air Quality Permit Application No. 10883 (Agency Interest No. 41351 - PRN20260001)

Dear Amanda Marrufo:

This letter is in response to your air quality permit application dated and received by the New Mexico Environment Department ("NMED" or "the Department") on April 27, 2026, to construct the "YGI Microgrid" near Santa Teresa, New Mexico in Doña Ana County. This letter addresses the Completeness Determination, Public Notice and Comment, and Invoice for Permit Fee and is intended for use by the applicant, interested individuals and groups, and the appropriate NMED Field Office.

Completeness Determination
A preliminary review has been completed and the information provided is sufficient to complete an evaluation of your permit application. Therefore, your application was ruled administratively complete on May 27, 2026. Under the requirements of 20.2.72 NMAC, the Department anticipates issuing or denying this permit on or before August 25, 2026.

Public Notice and Comment
The Department will publish a legal notice that will be sent to the NMED district or field office nearest the source (see enclosed). It describes the proposed facility, a summary of estimated emissions and ambient impact, the Department's preliminary intent to issue the permit, and the provisions for public comment.

The Department's analysis includes the Statement of Basis and is prepared as part of the technical review of the permit application. All interested persons have thirty (30) days from the date the public notice is published to notify the Department in writing of their interest in the permit application. The Department will notify all such persons of when and where the Department's analysis may be reviewed. Interested persons may review the Department's analysis for thirty (30) days after it becomes available at the NMED district or field office nearest the source. Written comments on the analysis or permit application and requests for a public hearing may be submitted to the Department during this second thirty (30) day period or any time before the permit is issued or denied.

The Department will hold a public hearing if the Secretary determines there is significant public interest in the permit application. The Department will also determine the time, date, and place of the hearing and shall notify the applicant and the public. At the hearing, all interested persons shall be given a reasonable chance to submit data, views or arguments orally or in writing, and to examine witnesses testifying at the hearing.

After the permit is issued or denied, the Department will mail written notice of the action taken on a permit application to all persons who submitted written comments or evidence on the application.

Invoice for Permit Fee
In accordance with 20.2.75 NMAC, this letter includes an invoice for the required permit fee in the amount of $16,170.00. The outstanding balance of $15,670.00 is due within thirty (30) days of the date ruled administratively complete. 20.2.75 NMAC states that the Department shall deny any permit application or request for permit revision if the required permit fee has not been paid. This fee is not refundable. An enforcement/compliance fee will also be assessed annually. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the New Mexico Environment Department and shall be accompanied by the enclosed remittance slip. Fees shall be submitted to New Mexico Environment Department, Air Quality Bureau at the address shown on the invoice.

20.2.72.200.E NMAC states: "for all sources subject to this part, applications for permits shall be filed prior to the commencement of construction, modification, or installation. Regardless of the anticipated commencement date, no construction, modification, or installation shall begin prior to issuance of the permit."

The Department may make additional requests for information pursuant to 20.2.72.203(E) NMAC. Under Policy AQB 02-013, if the application changes substantially from the original application that was submitted during review, an extension may be requested and subsequently granted.

If you have any questions, please contact me in Santa Fe at 505-629-2893 or julia.kuhn@env.nm.gov.

Sincerely,

Julia Kuhn Digitally signed by Julia Kuhn
Date: 2026.05.27 17:21:25 -06'00'

Julia Kuhn
Permits Section
Air Quality Bureau

cc via email: Jesse Lovegren, jesse.lovegren@trinityconsultants.com
cc via regular mail: Las Cruces NMED District/Field Office

Enclosures Sent with Letter:
- Legal Notice – Attachment A
- Permit fee invoice
- NMED District or Field Office Request – Attachment B

Docusign Envelope ID: EE648EB6-2C51-8A31-80B7-9D4AF1904299

EXHIBIT 3

MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

July 1, 2026

Sent via Certified Mail and Email

Amanda Marrufo
Operator
Yucca Growth Infrastructure, LLC
4353 North First Ave
San Jose, CA 95134
amanda.marruffo@bloomenergy.com

Re: Air Quality Permit Application No. NSR 10883 (Agency Interest No. 41351 - PRN20260001).

Dear Amanda Marrufo,

This letter is in response to your air quality permit application dated April 22, 2026, to construct the YGI Microgrid near Santa Teresa, NM in Doña Ana County. The New Mexico Environment Department (NMED) received the application on April 27, 2026.

Through this letter, NMED is providing notice that an extension of time is needed to process the above referenced application on the grounds that good cause is found for the following reasons:

- "The need to have public hearings" (20.2.72.207(C)(1)).
- "The permit application requires review of unusually complex technical and regulatory issues" (20.2.72.207(C)(5)).

Thus, in accordance with 20.2.72.207(C) NMAC, this letter extends the deadline set forth in 20.2.72.207(B) for a length of time not to exceed ninety days beyond the original August 25, 2026 decision deadline for Air Quality Permit Application No. NSR 10883 (Agency Interest No. 41351 - PRN20260001).

Original issuance/denial deadline:	August 25, 2026
Period of extension:	90 days
New issuance/denial deadline:	November 23, 2026

Sincerely,

DocuSigned by:
James Kenney
55675B6F3B82408...

Cabinet Secretary

Docusign Envelope ID: 7E8B5F03-84B3-8DD0-823D-03102265011E

EXHIBIT 4

RECEIVED
JUL 02 2026
Luis Lopez (OPF)

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF:
THE APPLICATION OF YUCCA GROWTH INFRASTRUCTURE'S, LLC FOR AN AIR QUALITY PERMIT, NO. NSR 10883

AQB 26-57(P)

NOTICE OF DOCKETING, APPOINTMENT OF HEARING OFFICER, AND DELEGATION OF FINAL DECISION AUTHORITY

In response to the Request for Public Hearing Determination filed in the Office of Public Facilitation on July 2, 2026, and pursuant to 20.1.4.200(B) NMAC, I, Cabinet Secretary James C. Kenney, hereby order a hearing and appoint Max Shepherd to serve as Hearing Officer in this matter. The Hearing Officer shall exercise all powers and duties granted under the New Mexico Environment Department Permitting Procedures found in 20.1.4 NMAC.

Additionally, pursuant to NMSA 1978 Section 9-7A-6(B)(2), I, Cabinet Secretary James C. Kenney, hereby delegate authority to make all final and dispositive decisions in this matter to Deputy Cabinet Secretary John Rhoderick.

DocuSigned by:
James C. Kenney
55875B6F3B624C8...
James C. Kenney, Cabinet Secretary
New Mexico Environment Department

CERTIFICATE OF SERVICE

I hereby certify that on the 7th day of July 2026, a copy of the foregoing was sent to the following parties or counsel of record via electronic mail:

Christopher Vigil
Assistant General Counsel
Brian Yardman-Frank
Assistant General Counsel
New Mexico Environment Department
Office of General Counsel
121 Tijeras Avenue NE, Suite 1000
Albuquerque, NM 87102
chris.vigil@env.nm.gov
brian.yardman-frank@env.nm.gov
Counsel for NMED

Max Shepherd
max.shepherd@comcast.net
Hearing Officer

By: */s/ Luis Lopez*
Luis Lopez, Hearing Clerk
Office of Public Facilitation
New Mexico Environment Department
Direct: 505-490-0186
luis.lopez@env.nm.gov

EXHIBIT 5

Timeline

Date	Action	Content
Feb. 2025 – present	NMELC announces its Project Jupiter campaign.	NMELC's campaign page states that it has been "relentlessly working" against the project "[s]ince Governor Michelle Lujan Grisham's first announcement of Project Jupiter . . . in February 2025." NMELC, *Data Centers — Project Jupiter & the Fight for Clean and Safe Drinking Water* (last visited July 15, 2026). The page's "TAKE ACTION" button drives an organized form-comment campaign urging NMED "to DENY the new air pollution application," *id.*, via a form letter demanding that NMED hold a public hearing in Santa Teresa.
Dec. 2025	Groups state they intend to challenge the Project's air permit applications.	By late 2025, counsel of record for both CBD and NMELC were publicly critiquing the applications in the press. *See* Joshua Bowling, *Data center Project Jupiter's greenhouse gas emissions could rival NM's largest cities*, Source New Mexico (Dec. 5, 2025). Mr. Cox was quoted stating he "anticipated a challenge to the air quality permits." *Project Jupiter permit applications forecast massive carbon fuel use*, Albuquerque Journal (Dec. 9, 2025). By December 15, 2025, NMELC — through Ms. Locke and Ms. Hovden — had lodged its hearing demand with the Department. NMELC Follow-Up Letter to NMED re Acoma, LLC Applications (Dec. 15, 2025) at 2, ¶ (2). That demand was publicized in the press. *NM Environmental Law Center calls for greater access to Project Jupiter air permit review*, Buffalo's Fire (Dec. 17, 2025).
Mar. 2, 2026	NMELC comment letter, submitted by Maslyn Locke and Kacey Hovden on behalf of Community Members Saldaña, Fuller, and Maldonado;	NMELC demanded a public hearing on each application. The same day, NEE filed its comment demanding that NMED "reject permit applications 10732 and 10734 outright." NEE, *We filed our comment opposing Project Jupiter's air pollution permit applications* (Mar. 2, 2026).

Date	Action	Content
	NEE comment opposing the applications.	
Apr. 27, 2026	Original applications withdrawn; YGI files the current application (Permit No. 10883).	Same-day press coverage of the new YGI application quoted NMELC counsel Ms. Hovden already critiquing its merits ("I don't know that this is the clean energy solution that they're saying it's going to be"). Joshua Bowling, *NM Project Jupiter data center developers announce new plans for generating power*, Source New Mexico (Apr. 27, 2026).
Apr. 29 – May 28, 2026	Opponents' counsel and NEE's executive director publicly critique the fuel-cell application on the merits.	Mr. Cox described the fuel-cell proposal as "essentially greenwashing" and critiqued its climate emissions. *Project Jupiter developers overhaul data center's power plan*, Santa Fe New Mexican (Apr. 29, 2026). Mr. Cox was later quoted with quantified emissions comparisons; Ms. Nanasi argued the merits of alternatives and burden allocation; and the same article quotes Ms. Hovden critiquing the fuel-cell design. *Massive New Mexico data center tries to 'greenwash' environmental impact with fuel cell proposal*, Oil & Gas Watch News (May 28, 2026).
May 20, 2026	NMELC comments on YGI's Permit No. 10883, submitted by Maslyn Locke and Kacey Hovden on behalf of Community Members Saldaña and Fuller.	The comment letter attacks the technical merits of the application and demands a public hearing. It advances the incompleteness theory matching NEE's statements at the scheduling conference. NMELC Comment Letter 1.
June 28, 2026	NEE provides a detailed analysis of the YGI application.	NEE obtains a technical assessment of the YGI application, stating it is intended to support the work of qualified professionals (legal counsel, environmental engineers, atmospheric scientists, hydrologists, public health specialists, and others) engaged on this case. *See* NEE Comment Letter, at Ex. A. NEE also began hosting technical materials on its website purporting to explain to the public how

Date	Action	Content
		fuel cells function. NEE, *Project Jupiter — the Time to Speak Out is Now* (June 2026).
July 2, 2026	NMELC files "additional comment, demand for public hearing and demand for permit application denial," submitted by Maslyn Locke, Kacey Hovden, and Eric Jantz.	The comment provides an emissions-specific merits analysis with quantified tonnage figures and footnoted authorities — including the single-unit stack-test representativeness critique ("one test, of a single 65-67 kW ES 6.5 unit, scaled to 2,462 MW with no demonstration of representativeness at the installed scale," performed over "only two days"). *See* NMELC Additional Comment (July 2, 2026).
July 6, 2026	NEE technical comments; CBD/Sierra Club submit a joint technical comment.	The NEE Comment Letter demands that the Secretary "must order a public hearing before any permit decision is issued," attaches a quantitative analysis (Ex. A) and the analyst's curriculum vitae (Ex. B), and articulates the completeness theory of its anticipated motion. CBD/Sierra Club advance the same "incomplete and therefore legally deficient" theory advanced by NMELC and NEE, along with other technical arguments.[4] CBD Comment Letter.
July 15, 2026	Scheduling conference.	The organizations advise the Hearing Officer that they lack sufficient time to prepare for the hearing they demanded.

[4]YGI, of course, disagrees with these arguments. The rules require "a description of the equipment or methods proposed by the applicant to be used for emission measurement," 20.2.72.203(A)(9) NMAC. This language uses the future tense for a reason: in a preconstruction program, measurement is something the source will do after it is constructed. The source cannot be constructed until the permit is in place. The rules accordingly require applicants to estimate the quantities of contaminants the source "will emit" after construction is completed, 20.2.72.203(A)(3) NMAC, and permit the use of EPA-approved dispersion modeling, 20.2.72.203(A)(4) NMAC. YGI has used testing information from representative units, worked with experts to obtain estimates, and conducted modeling in accord with state and federal rules and methods.

RECEIVED
By The Office Of The Secretary at 5:20 pm, Jul 24, 2026

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF THE ENVIRONMENT

IN THE MATTER OF:
THE APPLICATION
OF YUCCA GROWTH INFRASTRUCTURE, LLC
FOR AN AIR QUALITY PERMIT

AQB 26-57

NO. 10883

REQUEST FOR HEARING OFFICER TO ORDER DISCOVERY

Pursuant to the July 16, 2026 Scheduling Order, the Center for Biological Diversity and New Mexico Environmental Law Center on behalf of Jose Saldaña Jr. and Vivian Fuller hereby request the Hearing Officer order Applicant Yucca Growth Infrastructure, LLC to respond to the attached First Request for Production of Documents and Set of Interrogatories. This discovery request is directly related to the air pollution impacts of the proposed facility and the Applicant's ability to construct the proposed facility in a reasonable time. Both of these issues are highly relevant to this proceeding and critical to the New Mexico Environment Department's mandate to control air pollution and protect public health and the environment. This request is narrowly tailored to gather information that is not otherwise reasonably obtainable and will not cause unreasonable delay.

Respectfully submitted this 24th day of July 2026,

/s/ Colin Cox
Colin Cox
Gail Evans
PO Box 31417
Santa Fe, NM 87594
832.316.0580
ccox@biologicaldiversity.org
gevans@biologicaldiversity.org

Counsel for Center for Biological Diversity

/s/ Maslyn Locke
Maslyn Locke
Senior Staff Attorney
Eric Jantz
Legal Director
New Mexico Environmental
Law Center
Tel.: (505) 989-9022
mlocke@nmelc.org
ejantz@nmelc.org

Counsel for Jose Saldaña Jr. and Vivian Fuller

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF:
THE APPLICATION OF YUCCA GROWTH INFRASTRUCTURE'S, LLC FOR AN AIR QUALITY PERMIT, NO. NSR 10883

AQB 26-57 (P)

NEW MEXICO ENVIRONMENTAL LAW CENTER ON BEHALF OF JOSE SALDAÑA JR. AND VIVIAN FULLER AND CENTER FOR BIOLOGICAL DIVERSITY FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND SET OF INTERROGATORIES

To: Yucca Growth Infrastructure, LLC
c/o Jennifer L. Bradfute
David Kirmse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
jennifer@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

c/o Ms. Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
Telephone: (303) 861-2828
jbiever@williamsweese.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

The requests for production of documents described herein are pursuant to Rules 1-026 and 1-034 of the New Mexico Rules of Civil Procedure for the District Courts of New Mexico. Please produce legible copies of the requested documents for inspection at P.O. Box 12931, Albuquerque, New Mexico 87195, within thirty (30) days. Alternatively, to conserve time and resources, any documents that can be accurately produced in electronic format may be provided

through means agreed upon by both parties. For purposes of this request, documents include any documents authored by the Applicant Yucca Growth Infrastructure, LLC, as well as documents within its possession, custody, or control. Any objection must be served upon the Requestors' counsel within thirty (30) days of the service of these requests for production of documents.

DEFINITIONS

1. "Document" is used in the broadest sense possible and means any written, typed, printed, recorded or graphic matter, including electronically stored information, however produced or reproduced, or any type or description, regardless of origin or location, including without limitation all correspondence, records, memoranda, notes, lists, calendars, telexes, telecopies, messages (including, but not limited to, notes, reports, memoranda, or recordings of telephone conversations), electronic mail messages or transmissions, contracts, agreements, assignments, invoices, statements, acknowledgments, computer-generated or computer-stored documents or information, all other data compilations from which information can be obtained or translated, if necessary, reports and/or summaries of investigations, drafts and revisions of drafts of any documents, invoices, receipts and original preliminary notes. If a document has been prepared in several copies, or additional copies have been made, or copies are not identical, each non-identical copy is a separate document.

2. "Information" shall be construed expansively and shall include facts, data, opinions, knowledge, belief, images, impressions, concepts, and formulae.

INTERROGATORIES

1. Please describe the concentration of all chemicals in the pipeline gas, including, for example, levels of benzene, toluene, xylene, chloroform, sulfur compounds, radon and all other chemicals and radionuclides.

ANSWER:

2. Please describe what continuous emissions monitoring systems or parametric monitoring will be installed at the proposed facility to ensure that actual emissions are consistent with permitted assumptions and legal limits. If no continuous emissions monitoring systems or parametric monitoring will be installed, please describe how that will be adequate to ensure compliance with all applicable requirements under the Air Quality Control Act.

ANSWER:

3. Please describe the pressure and temperature of the desulfurization canisters and desulfurization media under all operating conditions, including normal operation, maintenance, startup, shutdown, and any other conditions.

ANSWER:

4. Please describe the expected temperature and atmospheric pressure conditions on days when the desulfurization canisters are opened.

ANSWER:

5. Please describe how many individual calendar days per year one or more desulfurization canisters will be opened for any reason.

ANSWER:

6. Please describe how spent desulfurization canisters and/or desulfurization media will be cleaned and/or removed from the facility. If canisters will be transported away from the facility, please describe the method of transport.

ANSWER:

7. Please describe the volume and weight of spent desulfurization canisters and desulfurization media that will be removed from the facility annually.

ANSWER:

8. During SOFC cooldown, the nickel-YSZ anode passes through the temperature range of 50-200°C at which nickel tetracarbonyl can form in the presence of carbon monoxide. $Ni(CO)_4$ is acutely toxic at sub-ppm concentrations. Please describe what anode purge

protocol is used during planned and unplanned shutdowns to eliminate CO from the anode compartment before it cools into the carbonyl formation range.

ANSWER:

9. When steel super alloys like those present in the proposed fuel cells are exposed to high temperatures, hexavalent chromium is formed. Please describe the emissions measurements of hexavalent chromium from the proposed fuel cells and proposed facility.

ANSWER:

10. Please describe the emissions profile during individual fuel call replacement and recommissioning events, specifically during the preheat transient before a replacement fuel cell reaches operating temperature? How many such events are anticipated annually at full facility scale, and are the cumulative emissions from recommissioning transients captured within the permit's annual emission inventory?

ANSWER:

11. Please describe the statistical basis, including confidence intervals, for scaling the emission test on a single 65kw unit by a factor of approximately 37,800 to arrive at proposed facility emissions.

ANSWER:

12. Please explain why the Applicant applied a 15% "safety factor" to its pollution calculations and the basis for choosing 15% specifically.

ANSWER:

13. Please explain why the Applicant used a 100% capacity factor for the proposed 2,462 megawatts in its pollution calculations, and whether 2,462 megawatts represents the entire nameplate capacity of the proposed plant.

ANSWER:

14. Please describe the contents of spent or degraded fuel cells and whether they contain hazardous materials.

ANSWER:

15. Please describe volume and weight of spent or degraded fuel cells that will be removed from the site annually.

ANSWER:

16. Please describe the maximum volumes of water needed to begin and then sustain ongoing operation of the proposed facility.

ANSWER:

17. Please describe the amount of water that will be discharged from the proposed facility.

ANSWER:

18. Please explain why the tons of carbon dioxide pollution do not match the amount of carbon dioxide pollution expected for the listed volume of methane gas consumption.

ANSWER:

19. Please describe the heating value of the pipeline gas, and whether it will remain constant or change for any reason, including, for example, seasonally.

ANSWER:

20. Please describe the temperature, pressure, chemical composition and flow rate of the anode and cathode side of each fuel cell, operating at nameplate as well as maintenance, startup, and shutdown conditions, at the beginning of life and through till the end of life of each fuel cell.

ANSWER:

21. Please describe the height and exit velocity of the anode and cathode side emissions, and whether those exhaust streams are combined.

ANSWER:

22. Please describe the expected methane slip of each fuel cell and of the proposed facility, and how unreacted methane in the fuel cell exhaust is handled.

ANSWER:

23. Please describe the expected hydrogen slip of each fuel cell and of the proposed facility, and how unreacted hydrogen in the fuel cell exhaust is handled.

ANSWER:

24. Please describe how the proposed facility will "cold start" or "black start," i.e, supply power or heat to begin initial operation of the fuel cells, and the expected pollution emissions from this process.

ANSWER:

25. Please describe how the facility will recover waste heat and what that heat will be used for.

ANSWER:

26. Please explain the quantity of scandium necessary to build all of the fuel cells for the proposed facility.

ANSWER:

27. Please explain how Bloom acquires scandium for the fuel cells, and whether any of its scandium is mined and/or processed in any way in China.

ANSWER:

28. Please explain where the Applicant intends to source methane fuel for the proposed facility given the State Land Office's refusal to approve rights-of-way for any pipeline to the proposed facility.

ANSWER:

29. Please provide the detailed timeline for acquisition and installation of the fuel cells.

ANSWER:

REQUESTS FOR PRODUCTION

1. Please provide all documents that the Applicant has produced to, created for or otherwise shared with the New Mexico Environment Department, New Mexico Economic Development Department, and State Engineer of New Mexico from January 1, 2025 until the present.

ANSWER:

2. Please provide all documents showing communications between the Applicant and the New Mexico Environment Department, New Mexico Economic Development Department, or the State Engineer of New Mexico from January 1, 2025 until the present.

ANSWER:

3. Please provide all documents related to the chemical composition and/or heating value of the pipeline gas for the facility.

ANSWER:

4. Please provide all documents related to emissions testing from the proposed fuel cells, including but not limited to statistical analysis of the emissions testing demonstrating the adequacy of the proposed testing in estimating emissions from the proposed plant.

ANSWER:

5. Please provide all documents related to the 15% "safety factor" applied to the pollution limits for the proposed facility.

ANSWER:

6. Please provide all documents related to performance of the proposed fuel cells under various operating conditions, including but not limited to ambient temperatures above 113 degrees Fahrenheit and atmospheric pressures present above 4,000 feet in elevation.

ANSWER:

7. Please provide all documents related to emissions testing of formaldehyde, nickel tetracarbonyl, or hexavalent chromium from the fuel cells.

ANSWER:

8. Please provide all documents showing how the fuel cells reform hydrogen from methane and how the fuel cells generate electricity.

ANSWER:

9. Please provide all documents related to the performance or efficiency of the proposed fuel cells over their lifetime.

ANSWER:

10. Please provide all documents related to the handling and replacement of spent or degraded fuel cells, or fuel cells otherwise at the end of their useful life.

ANSWER:

11. Please provide all documents related to emissions testing from the proposed desulfurization canisters.

ANSWER:

12. Please provide all documents related to the design, operation, and handling of the proposed desulfurization canisters.

ANSWER:

13. Please provide all documents showing or related to the pressure and temperature of the desulfurization canisters and desulfurization media under all operating conditions, including normal operation, maintenance, startup, shutdown, and any other conditions.

ANSWER:

14. Please provide all documents showing the expected volume and weight of spent desulfurization canisters and/or desulfurization media that will be removed from the proposed facility.

ANSWER:

15. Please provide all documents demonstrating the availability of the proposed fuel cells sufficient to complete construction of the facility, including guaranteed delivery dates by the manufacturer.

ANSWER:

16. Please provide all documents demonstrating the availability of sufficient scandium to construct the proposed fuel cells.

ANSWER:

17. Please provide all documents demonstrating the availability of sufficient methane fuel for the proposed facility.

ANSWER:

18. Please provide all documents related to temperature, pressure, chemical composition and flow rate of the anode and cathode side of each fuel cell, operating at nameplate as well as maintenance, startup, and shutdown conditions, at the beginning of life and through till the end of life of each fuel cell.

ANSWER:

19. Please provide all documents related to the water needs of the proposed facility.

ANSWER:

20. Please provide all documents related to the wastewater expected to be produced by the proposed facility, its chemical makeup, and how it will be handled and disposed of.

ANSWER:

21. Please provide all documents related to methane slip from the proposed fuel cells.

ANSWER:

22. Please provide all documents related to hydrogen slip from the proposed fuel cells.

ANSWER:

23. Please provide all documents showing how the Applicant intends to "cold start" or "black start" the proposed fuel cells, and how often the Applicant expects to do so.

ANSWER:

24. Please provide all documents related to waste heat recovery at the proposed facility.

ANSWER:

DATED: July 24, 2026

Respectfully submitted:

By: */s/ Colin Cox*

Colin Cox
Gail Evans
Climate Law Institute
PO Box 31417
Santa Fe, NM 87594
(832) 316-0580
gevans@biologicaldiversity.org
ccox@biologicaldiversity.org

Counsel for Center for Biological Diversity

/s/ Maslyn Locke
Maslyn Locke
Senior Staff Attorney
Eric Jantz
Legal Director
New Mexico Environmental
Law Center
Tel.: (505) 989-9022
mlocke@nmelc.org
ejantz@nmelc.org

Counsel for Jose Saldaña Jr. and Vivian Fuller

Certificate of Service

I hereby certify that on July 24, 2026 a copy of the foregoing Request for Hearing Officer to Order Discovery and attached First Request for Production of Documents and Set of Interrogatories was emailed to the persons listed below.

Christopher Vigil
Brian Yardman-Frank
New Mexico Environment Department
Office of General Counsel
121 Tijeras Avenue NE,
Suite 1000 Albuquerque, NM 87102
chris.vigil@env.nm.gov
brian.yardman-frank@env.nm.gov
Counsel for NMED

Max Shepherd
max.shepherd@comcast.net
Hearing Officer

Luis Lopez
Luis.lopez@env.nm.gov
Hearing Clerk

Bruce Wetherbee
60 Concord, Massachusetts 01742
editor@thecandlepublishing.com
(505) 501-1570

Joe Cardillo
344 4th Street SW
Albuquerque, NM 87102
joe@progressnownm.org
(505) 221-5661

Nicholas Maxwell
P.O. Box 1064
Hobbs, New Mexico 88241
Telephone: (575) 441-3560
inspector@sunshineaudit.com

Isaiah Zemke
izemke@smwlu49.org
Sheet Metal Workers Local Union No. 49

Jennifer L. Bradfute
David Kirmse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
jennifer@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

Ms. Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
Telephone: (303) 861-2828
jbiever@williamsweese.com
Counsel for Applicant Yucca Growth Infrastructure

Nathaniel Chakeres
General Counsel
New Mexico Office of the State Engineer
P.O. Box 25102
Santa Fe, NM 87504-5012
(505) 231-4459
nathaniel.chakeres@ose.nm.gov

Yiwei Chen
Economic Development New Mexico
P.O. Box 20003
Santa Fe, NM 87504-5003
(505) 394-5481
yiwei.chen@edd.nm.gov

Andre Makarski
United Association Local 412
510 San Pedro
Albuquerque, NM 87108
andre@ualocal412.org

/s/ Colin Cox

RECEIVED
By The Office Of The Secretary at 5:06 pm, Jul 27, 2026

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF THE ENVIRONMENT

IN THE MATTER OF:
THE APPLICATION **AQB 26-57**
OF YUCCA GROWTH INFRASTRUCTURE, LLC
FOR AN AIR QUALITY PERMIT

NO. 10883

REQUEST FOR HEARING OFFICER TO ORDER DISCOVERY

Pursuant to the July 16, 2026 Scheduling Order, at 3, ¶7, New Energy Economy hereby requests the Hearing Officer order Applicant Yucca Growth Infrastructure, LLC ("YGI") and Bloom Energy,[1] the party responsible for the new source, to respond to the attached First Set of Interrogatories and Requests for Production of Documents. These discovery requests directly target a critical issue under 20.2.7.208(G) NMAC: whether YGI has a credible, evidence-based showing that this unprecedented installation can actually be constructed within a reasonable time by Bloom Energy. They also probe the reliability of Bloom Energy's emissions assumptions in light of prior regulatory actions, financial restatements, manufacturing limitations, supply-chain risks, and the absence of any comparable operating facility. The Hunterbrook investigation[2] also raises specific questions about Bloom Energy's claimed manufacturing scale, scandium supply, and backlog that make focused discovery particularly appropriate.

[1] Yucca Growth Infrastructure, LLC NSR Application at 2.

[2] See attached Exhibit A, for convenience. https://hntrbrk.com/investigations/bloom

Respectfully submitted this 27th day of July, 2026,

NEW ENERGY ECONOMY

By: */s/ Mariel Nanasi*
Mariel Nanasi
Christopher Dodd
Attorneys for New Energy Economy
422 Old Santa Fe Trail
Santa Fe, NM 87501
MNanasi@NewEnergyEconomy.org
chris@fayerbergdodd.com
505.469.4060.

IN THE MATTER OF:
THE APPLICATION **AQB 26-57**
OF YUCCA GROWTH INFRASTRUCTURE, LLC
FOR AN AIR QUALITY PERMIT

NO. 10883

NEW ENERGY ECONOMY'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND SET OFINTERROGATORIES

To: Yucca Growth Infrastructure, LLC
c/o Jennifer L. Bradfute
David Kirmse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
jennifer@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

c/o Ms. Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
Telephone: (303) 861-2828
jbiever@williamsweese.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

c/o Bloom Energy Corp
Amanda Marruffo
Director, EH&S
4353 North First Ave, San Jose, CA 95134
amanda.marruffo@bloomenergy.com

DEFINITIONS

1. "Document" is used in the broadest sense possible and means any written, typed, printed, recorded or graphic matter, including electronically stored information, however produced or reproduced, or any type or description, regardless of origin or location, including without limitation all correspondence, records, memoranda, notes, lists, calendars, telexes, telecopies,

messages (including, but not limited to, notes, reports, memoranda, or recordings of telephone conversations), electronic mail messages or transmissions, contracts, agreements, assignments, invoices, statements, acknowledgments, computer-generated or computer-stored documents or information, all other data compilations from which information can be obtained or translated, if necessary, reports and/or summaries of investigations, drafts and revisions of drafts of any documents, invoices, receipts and original preliminary notes. If a document has been prepared in several copies, or additional copies have been made, or copies are not identical, each non-identical copy is a separate document.

2. "Information" shall be construed expansively and shall include facts, data, opinions, knowledge, belief, images, impressions, concepts, and formulae.

NEE INTERROGATORY NO. 1

Identify the largest Bloom Energy Solid Oxide Fuel Cell (SOFC) installation that has ever been constructed and operated anywhere in the world, stating:

a. its location;

b. installed capacity (MW);

c. date placed into commercial operation;

d. number of fuel cell modules or stacks;

e. average annual capacity factor;

f. all measured emissions data;

g. whether or not there were delivery delays and if yes, by how many months/years; and

h. how that facility compares technically and operationally to the approximately 2,460 MW Project Jupiter proposal.

ANSWER:

NEE INTERROGATORY NO. 2

State every engineering study, modeling report, design analysis, or validation study demonstrating that Bloom Energy's SOFC technology can reliably operate at approximately 2,460 MW.

For each study identify:

a. author;

b. date;

c. assumptions;

d. whether based upon actual operating experience or computer modeling;

e. whether peer reviewed;

f. whether submitted to any governmental agency.

ANSWER:

NEE INTERROGATORY NO. 3

Describe in detail every emissions test performed that forms the basis for the emissions factors used in this permit application, including:

a. size of the unit tested;

b. number of stacks tested;

c. duration of testing;

d. operating load;

e. startup emissions;

f. shutdown emissions;

g. degradation testing;

h. testing under malfunction conditions;

i. testing of multiple simultaneous stacks.

ANSWER:

NEE INTERROGATORY NO. 4

Identify every reason why emissions measured from a single Bloom Energy SOFC module or laboratory-scale installation may not accurately predict emissions from approximately 2,275 individual fuel-cell stacks proposed for Project Jupiter.

ANSWER:

NEE INTERROGATORY NO. 5

State whether Bloom Energy has ever demonstrated that emissions scale linearly when thousands of SOFC stacks operate simultaneously.

If so, identify every study supporting that conclusion.

ANSWER:

NEE INTERROGATORY NO. 6

State Bloom Energy's current annual manufacturing capacity for SOFC systems.

Identify:

a. current annual production capacity;

b. expected production capacity through 2030;

c. existing manufacturing backlog;

d. manufacturing commitments already contracted;

e. production capacity allocated specifically to Project Jupiter.

ANSWER:

NEE INTERROGATORY NO. 7

Provide the planned sequence for:

a. equipment delivery;
b. site preparation;
c. installation;
d. gas connection;
e. electrical connection;
f. testing;
g. commissioning; and
h. commencement of commercial operation.

ANSWER:

NEE INTERROGATORY NO. 8

State every assumption relied upon in concluding that Project Jupiter can be completed within a reasonable time as required by 20.2.7.208(G) NMAC.

ANSWER:

NEE INTERROGATORY NO. 9

Identify every raw material necessary to manufacture the Project Jupiter fuel cells, including:

a. scandium;

b. yttria;

c. zirconia;

d. nickel;

e. ceramics;

f. interconnect materials;

g. specialty alloys.

For each identify:

• supplier;

• country of origin;

• expected quantities;

• delivery schedule;

• supply risks.

ANSWER:

NEE INTERROGATORY NO. 10

State whether Project Jupiter requires scandium.

If so,

a. identify total quantity required;

b. identify supplier(s);

c. identify country of origin;

d. identify whether any supply originates directly or indirectly from China;

e. identify every contingency plan if scandium becomes unavailable.

ANSWER:

NEE INTERROGATORY NO. 11

Identify every internal analysis evaluating whether Bloom Energy's projected manufacturing expansion is limited by global scandium availability.

ANSWER:

NEE INTERROGATORY NO. 12

State whether Bloom Energy has analyzed whether Project Jupiter alone could consume a substantial percentage of annual global scandium production.

If so, identify every such analysis.

ANSWER:

NEE INTERROGATORY NO. 13

Identify every governmental investigation, SEC investigation, shareholder action, securities action, EPA enforcement action, hazardous waste action, accounting restatement, emissions-related investigation, or regulatory proceeding involving Bloom Energy from January 1, 2018 to present, including but not limited to:

a. Delaware books-and-records litigation regarding degradation and emissions claims;

b. EPA hazardous waste enforcement;

c. securities fraud litigation;

d. accounting restatement litigation.

ANSWER:

NEE INTERROGATORY NO. 14

State whether Bloom Energy has ever revised downward:

a. emissions estimates;

b. degradation rates;

c. useful life estimates;

d. maintenance intervals;

e. availability assumptions;

f. efficiency assumptions

for any SOFC installation.

ANSWER:

NEE INTERROGATORY NO. 15

Identify every occasion in which Bloom Energy's public statements regarding:

• emissions,

• reliability,

• manufacturing capacity,

• backlog,

• supply chain,

• deployment schedule,

were later corrected, withdrawn, restated, or materially revised.

ANSWER:

NEE INTERROGATORY NO. 16

State whether Bloom Energy has ever failed to timely complete a fuel-cell project exceeding 50 MW.

If yes, identify each project and describe the delay.

ANSWER:

NEE INTERROGATORY NO. 17

Identify every Project Jupiter milestone dependent upon:

a. FERC pipeline approval;

b. air permit issuance;

c. fuel-cell manufacturing;

d. transmission availability;

e. natural gas infrastructure;

f. fuel-cell delivery; and

g. water infrastructure.

ANSWER:

NEE INTERROGATORY NO. 18

Identify every internal risk assessment prepared concerning the possibility that Project Jupiter cannot be completed by the proposed commercial operation date.

ANSWER:

NEE INTERROGATORY NO. 19

State Bloom Energy's current maximum annual manufacturing capacity for Bloom Energy Servers and related solid oxide fuel-cell equipment, expressed in megawatts and gigawatts, and identify the factual basis for that figure.

ANSWER:

NEE INTERROGATORY NO. 20

State Bloom Energy's actual production during each calendar year from 2020 through the present, expressed in:

a. megawatts manufactured;
b. number of Energy Servers manufactured;
c. number of fuel-cell modules and stacks manufactured; and
d. percentage of stated manufacturing capacity utilized.

ANSWER:

NEE INTERROGATORY NO. 21

State whether Bloom Energy has completed the manufacturing expansion necessary to achieve 2 GW of annual production capacity. If not, identify:

a. the percentage completed;
b. work remaining;
c. projected completion date;
d. known delays; and
e. circumstances that could prevent completion by the end of 2026.

ANSWER:

NEE INTERROGATORY NO. 22

Provide Bloom Energy's complete manufacturing schedule for Project Jupiter, including the planned date for:

a. commencement of manufacturing;
b. completion of the first unit;
c. completion of each production batch;
d. completion of 25%, 50%, 75%, and 100% of the equipment; and
e. final factory acceptance testing.

ANSWER:

NEE INTERROGATORY NO. 23

State the total amount of Bloom Energy's current backlog and identify what portion consists of:

a. binding purchase obligations;
b. nonbinding commitments;
c. framework agreements;
d. options;
e. service revenue;
f. anticipated tax credits; and
g. projects that have not received required permits or financing.

ANSWER:

NEE INTERROGATORY NO. 24

Describe the methodology Bloom Energy used to determine that it possesses sufficient manufacturing capacity to supply approximately 2,460 MW of equipment for Project Jupiter while also satisfying its other customer commitments.

ANSWER:

NEE INTERROGATORY NO. 25

State the earliest date on which Bloom Energy could manufacture all equipment required for Project Jupiter assuming:

a. existing manufacturing capacity only;
b. successful expansion to 2 GW per year; and
c. continued performance of all other existing customer obligations.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 1

Produce all emissions testing reports relied upon in preparing this permit application.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 2

Produce all degradation studies for Bloom Energy SOFC systems.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 3

Produce all engineering analyses comparing Project Jupiter to existing Bloom Energy installations.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 4

Produce every document evaluating Bloom Energy s manufacturing capacity through 2030.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 5

Produce every document concerning scandium availability, procurement, shortages, supply risks, export restrictions, or dependence on Chinese suppliers.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 6

Produce every internal risk assessment evaluating the possibility that Project Jupiter cannot be completed within the time contemplated in the permit application.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 7

Produce all communications with Oracle, OpenAI, Crusoe, Brookfield, Rystad Energy, Utility Dive, SemiAnalysis, or any other third party regarding:

- manufacturing capacity;
- project schedule;
- supply-chain limitations;
- scandium availability;
- production bottlenecks.

ANSWER:

NEE REQUEST FOR PRODUCTION NO. 10

Produce all documents supporting the assertion that emissions from approximately 2,275 SOFC stacks can be reliably extrapolated from laboratory-scale or single-module testing.

ANSWER:

Respectfully submitted this 27th day of July, 2026,

NEW ENERGY ECONOMY

By: */s/ Mariel Nanasi*
Mariel Nanasi
Christopher Dodd
Attorneys for New Energy Economy
422 Old Santa Fe Trail
Santa Fe, NM 87501
MNanasi@NewEnergyEconomy.org
chris@fayerbergdodd.com
505.469.4060.

CERTIFICATE OF SERVICE

I hereby certify that on the 27th day of July 2026, a copy of the foregoing was sent to the following parties or counsel of record via electronic mail:

Max Shepherd
max.shepherd@comcast.net
Hearing Officer

Christopher Vigil
Assistant General Counsel
Brian Yardman-Frank
Assistant General Counsel
New Mexico Environment Department
Office of General Counsel
121 Tijeras Avenue NE, Suite 1000
Albuquerque, NM 87102
christopherj.vigil@env.nm.gov
brian.yardman-frank@env.nm.gov
Counsel for NMED

Jennifer L. Bradfute
David Kirmse
P.O. Box 90233
Albuquerque, NM 87199
Telephone: (505) 264-8740
jennifer@bradfutelaw.com
david@bradfutelaw.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

Jennifer L. Biever
Williams Weese Pepple & Ferguson, P.C.
1801 California Street, Suite 3400
Denver, CO 80202
jbiever@williamsweese.com
Counsel for Applicant Yucca Growth Infrastructure, LLC

Nicholas R. Maxwell
P.O. Box 1064
Hobbs, NM 88241
inspector@sunshineaudit.com
Pro Se Intervenor

Colin Cox
Gail Evans
The Center for Biological Diversity
1025 ½ Lomas NW
Albuquerque, New Mexico 87102
ccox@biologicaldiversity.org
gevans@biologicaldiversity.org
Counsel for Center for Biological Diversity

Maslyn Locke
Senior Staff Attorney
Eric Jantz
Legal Director
New Mexico Environmental Law Center
Tel.: (505) 989-9022
mlocke@nmelc.org
ejantz@nmelc.org
Counsel for Vivian Fuller and Jose Saldaña Jr.

Bruce Wetherbee

60 Thoreau Street #103
Concord, MA 01742
editor@thecandlepublishing.com
Pro Se Intervenor

Joe Cardillo
344 4th Street SW
Albuquerque, NM 87102
joe@progressnowNM.org
Pro Se Intervenor

Andre Makarski
United Association Local 412
510 San Pedro
Albuquerque, NM 87108
andre@ualocal412.org

Esperanza Chairez
Zephyr Jaramillo
esperanza@yuccaim.org
Youth United for Climate Crisis Action

Yiwei Chen
Economic Development New Mexico
P.O. Box 20003 Santa Fe, NM 87504-
5003 (505) 394-5481
yiwei.chen@edd.nm.gov

Isaiah Zemke
izemke@smwlu49.org Sheet Metal
Workers Local Union No. 49

Nathaniel Chakeres General Counsel
New Mexico Office of the State Engineer
P.O. Box 25102 Santa Fe, NM 87504-
5012 (505) 231-4459
nathaniel.chakeres@ose.nm.gov

Christine Dobbin
1 Cielo Azul Anthony, NM 88021
(915) 412-9148
dobbin.cc@gmail.com

By: */s/ Mariel Nanasi*
NEW ENERGY ECONOMY

Mariel Nanasi
Christopher Dodd
Attorney for New Energy Economy
422 Old Santa Fe Trail
Santa Fe, NM 87501
MNanasi@NewEnergyEconomy.org
chris@fayerbergdodd.com
505.469.4060.

Bloom's Big Lie

Hidden China Supply Chain, Dubious Deals, and Aggressive Accounting Threaten $70 Billion AI Growth Story

BY: Till Daldrup, Dhruv Patel, Jean Wang, Blake Spendley, Sam Koppelman | **EDITOR:** Vikas Kumar |
July 8, 2026 12:59 PM EST

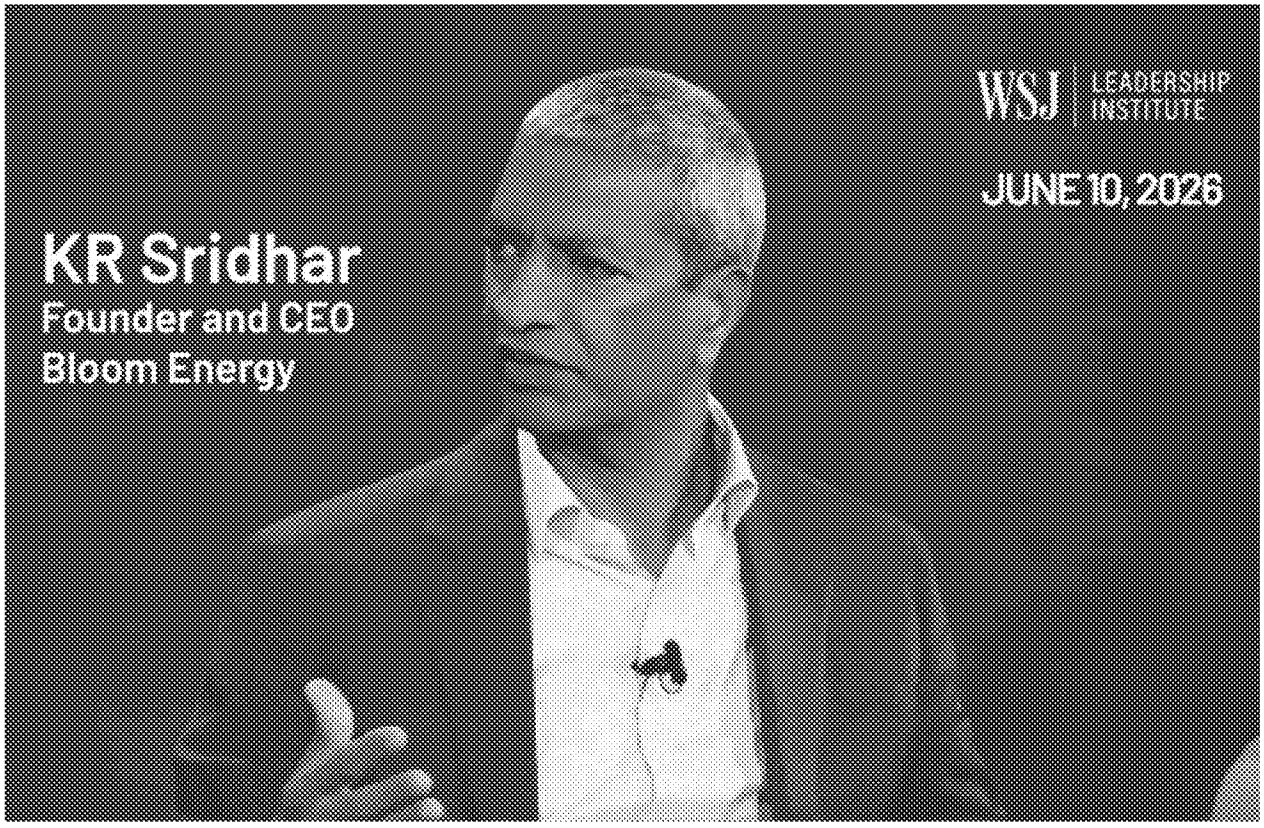


Illustration: Daniel DeLorenzo

> ***Based on Hunterbrook Media's reporting, at the time of publication Hunterbrook Capital is short $BE including derivatives and long a basket of comparable securities, as well as long $NB including derivatives and short a basket of comparable securities. Positions will change. This article is not investment advice or a recommendation to buy, sell, or hold any security. See full disclosures below.***

- Bloom Energy is one of the AI boom's biggest winners. $BE is up about 2,000% in two years. Its valuation peaked around $100 billion. The vision: fuel cells powering AI data centers years faster than the electric grid, with Bloom saying it can scale

from about a gigawatt of deployments in 2026 to 5 gigawatts annually. It’s a compelling pitch, especially in a world where power from legacy players, including turbine manufacturers, is backlogged.

- That growth story rests on a supply chain claim that Bloom's CEO has made at least five times since February 2025, on earnings calls, to Semafor, on a podcast — and onstage with The Wall Street Journal last month. The promise: Bloom has "no China supply chain" and is "not dependent on China for scandium," the rare earth at the core of each Bloom fuel cell. Bloom’s claim matters because Beijing now requires an export license for every shipment of scandium leaving China. If Bloom depends on Chinese scandium, China holds an off-switch on Bloom — and on the American data centers that may one day use its power.
- The problem: Bloom is, in fact, reliant on Chinese scandium, according to global trade data, Chinese corporate filings, satellite imagery, and Hunterbrook's messages with Bloom's suppliers in China. Hunterbrook traced four separate China-linked routes into Bloom's supply chain — scandium oxide shipped directly to its Delaware plant, plus scandium-bearing ceramics and powders flowing through intermediaries in Thailand, Japan, and South Korea. A sales representative of Hunan Oriental Scandium — which claims over 50% of the global market for fuel-cell-grade scandium oxide — told Hunterbrook: "We are also BE's largest supplier of scandium." Asked how the material reaches U.S. customers under Beijing's controls: "Not exported directly." Hunan Oriental was featured at Bloom’s May supplier conference as one of three Chinese scandium-linked suppliers. One received Bloom’s “Impact Supplier Award.”
- Show Me the Scandium: Even with supply from China, the scandium math fails. Hunterbrook's supply-demand model — built from government filings, Bloom's patents, industry data, and peer-reviewed studies — shows Bloom alone needs roughly 220 tons of scandium oxide to meet Wall Street's 5 GW expectations. But that’s against total projected global supply of only about 240 tons versus total global demand of about 310 tons, including supply locked up by customers like Lockheed Martin (for the F-35 fighter jet). Bloom already claims to be the largest scandium consumer in the world. On the numbers, the production ramp underpinning Bloom's valuation appears physically and commercially unattainable — with essentially all Wall Street models of Bloom's production implying a scandium shortage by 2028 based on Hunterbrook's model.
- The demand side of the story is also not what it appears. In 4Q25, 74% of Bloom's revenue — $574 million of $778 million — came from joint ventures Bloom part-owns with Brookfield. Bloom's own footnotes concede these customers "may be a project-finance affiliate rather than the ultimate end user." What Bloom’s recent revenue growth shows is that Brookfield will finance Bloom's production, not that a

meaningful customer base has adopted Bloom's fuel cells. And it appears Bloom has been recognizing revenue well before its fuel cells have actually been deployed.

- The Brookfield partnership's initial promise, a European AI factory site to be named "before the end of the year," does not seem to have been fulfilled. The designated anchor tenant for its unbuilt AI project is Radiant, Brookfield's own captive cloud company, which has no publicly named CEO or disclosed customers. The Brookfield fund backing Radiant is anchored in part by Nvidia, whose chips the factories will house. Even by the standards of AI roundtripping — which can be positive sum — the deal looks especially circular.
- Bloom markets an unaudited $20 billion "backlog" of orders. Its remaining performance obligations (RPO) — the analog to backlog that its auditor reviews — total $492.6 million as of March 31. That’s roughly 2.5% of the backlog. Among 10 peers Hunterbrook analyzed, including GE Vernova, Oracle, Microsoft, and CoreWeave, the widest comparable gap between backlog and RPO was about 2x. Bloom's is over 40x, in part because it includes ongoing servicing revenue customers are not obligated to pay and tax credits the government has not agreed to grant.
- The two flagship projects presumably driving that backlog are both facing serious challenges to their viability. Oracle's Project Jupiter in New Mexico has no approved air permit for fuel cells and no gas pipeline to feed the fuel cells, leading research firm SemiAnalysis to push back its base case for first power from 2027 to 2029. Hunterbrook interviews with New Mexico officials and an environmental group suing to stop the Oracle project indicate it could be delayed into the 2030s, or even canceled outright like Blackstone’s data center in Virginia last week. Meanwhile, AEP's $2.65 billion fuel cell order also appears to have slipped, with the utility updating its investor deck from a target deployment by the end of 2028 to one "no later than 2030.” That deal, which represents a meaningful share of Bloom’s backlog — related to a campus that reportedly lost its developer Crusoe in June — is backstopped by an unnamed hyperscaler that can walk away by covering AEP's costs incurred, plus roughly 10%. Both new Oracle and AEP delays followed Bloom raising guidance in its last earnings call.
- Put together: Either the 5 GW ramp is real — and the scandium math breaks it, plus Beijing holds the off-switch — or it is not, and the record quarters are largely circular financing.
- Bloom can't easily engineer its way out. Its own patents identify too little scandium in the electrolyte as a cause of accelerated fuel-cell aging. Cutting scandium seems to reduce the stack life on which Bloom's 10-to-15-year service contracts depend. Nor can ex-China supply fill the gap: "Right now in the Western world, there's basically no scandium processing capability to speak of, or just very, very little," John Mavrogenes, a professor of economic geology at the Australian National University,

told Hunterbrook. "It would be a long road to say we're gonna get serious about scandia."

- Bloom has repeated this pattern for years: When end demand doesn't materialize, it finds an intermediary willing to bet on Bloom — then books that bet as growth. Delaware ratepayers were legally obligated to buy Bloom's power for two decades, at costs that eventually ran over five times what the public was originally told, for jobs that came up 600 short of Bloom's projections. SK ecoplant committed to volumes that propped up two years of results, then quietly got three extra years to comply when Korean demand stalled. The month after SK ecoplant began selling its Bloom stake, Bloom formed its joint ventures with Brookfield, which is now the counterparty buying Bloom's boxes. Each time, the financier's commitment — not a customer's consumption — makes the numbers.
- The people in charge of reporting those numbers keep changing. Bloom has had four finance chiefs since the start of 2024, including nearly a year with no permanent CFO, which happened to be the same year the Brookfield structure was built. The CEO, meanwhile, has never changed.
- Neither Bloom nor its CEO replied to Hunterbrook's repeated requests for comment, which laid out our findings in detail. Oracle replied to initial outreach, then did not respond when asked if it knew Bloom sources from China. Brookfield did not respond to repeated outreach from Hunterbrook. AEP directed Hunterbrook to links of statements it had already made.
- While Bloom did not respond to our requests, it certainly seems like someone at the company read our questions. The day before publication, Bloom published a blog post about scandium, written by its COO. The post confirmed several of Hunterbrook's findings, including that scandium oxide plays "an important role" in the functioning of its fuel cells, and that Bloom believes itself to be the world's biggest consumer of the rare earth. Bloom also included vague responses to some of our other findings. Rather than echo Sridhar's unequivocal statements about China, the blog post asserts that no "single country" can determine Bloom's "destiny." It explains that Bloom sources scandium from the by-products of other mining operations — as Hunterbrook's reporting already noted — giving titanium as an example. Bloom emphasized that more than half of titanium mining (though not necessarily half of scandium production) occurs "outside of China." The post further claims Bloom believes its supply chain "can support up to 25 GW per year," but did not share any details on the calculations or assumptions that lead the company to that belief; nor did Bloom specify the timeline of when that supply would become available. Per our calculations, which are based on the scandium levels listed in Bloom's own patents, 25 GW of power would require roughly 620 tons of scandium a year: about 10 times what the entire world consumed in 2025, per USGS figures.

> Bloom cautions readers: "This article was published on July 7, 2026, and is for informational and educational purposes only. Readers are encouraged to read Bloom's full disclosures, including information on potential risks and uncertainties that may impact Bloom's business, set forth in its periodic reports filed with the SEC." As far as we can tell, no other post on the company's blog includes this disclaimer. As of press time, Bloom has not issued a press release or 8-K denying any of the facts presented in this article.

"We are not dependent on China for scandium," Bloom Energy ($BE) CEO KR Sridhar pledged in an April 2025 earnings call. "I can state that very clearly."

"We do import materials and components from abroad, but not from China," he said.

Analysts pressed him three times on Bloom's supply chain. He left no room for ambiguity.

"What you need to understand is none of our critical materials come from contested supply chains or war zones, and there is no China supply chain for us."

Sridhar made the same guarantee in Bloom's February 2025 call: "We are not dependent on China for our supply chain, and that is super important."

That April, China added scandium to a list of materials requiring national security export licenses. That means the material can only leave China with Beijing's discretion on a case-by-case basis.

Among many exotic uses, scandium is essential to America's F-35 fighter jets, making access to the metal a national security issue for both the U.S. and China.

But the biggest buyer of scandium isn't any government. It's Bloom, which, according to Sridhar, has become the single largest consumer of the metal in the world, because scandium is a critical component of its fuel cells.

Specifically, scandium is the key material in the electrolyte of Bloom's fuel cells ("Bloom Boxes"). It allows electricity to be produced and lengthens the fuel cell's lifespan. There is no known commercially viable substitute for scandium in Bloom's fuel cell design that wouldn't degrade quality, according to the company's patents and fuel cell experts that Hunterbrook interviewed.

The problem: China produces most of the world's scandium, by one estimate as much as 90%.

That is why the company has been asked, repeatedly, about how it procures the metal. And it is likely why Bloom has been so insistent that it is not reliant on China.

In a September 2025 interview with Semafor, Sridhar went as far as to say that Bloom had decided more than 20 years ago that it would not rely on Chinese suppliers. "Starting in 2004, we said we are not going to depend on a Chinese supply chain. If we believe in energy abundance for all, there cannot be a single source to strangle you," he said.

Then he told an energy podcast: "We never coupled ourselves to the China supply chain, which in hindsight means today we don't have to decouple from something." Sridhar specifically said this was a big part of Bloom's edge over gas turbine producers, whose supply chains he described as rooted "in the same place."

Last month, Sridhar stated yet again that Bloom is not sourcing from China in a June 10 interview onstage with The Wall Street Journal.

"Very early on in the company we made a decision that we are only going to depend on supply chains that we can completely trust and that was a country we avoided," he said, responding to a WSJ question on China. He gave 2005 as the year the company made this decision. Then he teased a possible deal with the U.S. Department of Defense based on Bloom's independence from Chinese supply.

But Bloom *does* rely on Chinese scandium — and it did at the time of each of these claims, according to Hunterbrook's analysis based on trade data, satellite images, and conversations with major suppliers and experts.

In total, we found four separate trade routes that appear to show Chinese scandium is still part of Bloom's supply chain, and the material is reaching the U.S. through intermediary countries.

As recently as May 2026, Bloom even featured three Chinese scandium suppliers — one of them with the word "scandium" in its name — on a logo wall at its supplier conference.



Chinese scandium suppliers logos on logo wall shown at Bloom's 2026 supplier conference in May, posted to Linkedin. Red boxes added by Hunterbrook. Source: Linkedin

After the April 2025 earnings call, Bloom made a subtle update to its quarterly filing for 3Q25, adding that China supplies "multiple components including 70% of rare earth metals used in electronic and electromechanical components that are part of our tier 2 and tier 3 sub-assembly suppliers." Its 10-K report, filed in February, then used substantially similar language on pages 47 and 56, but dropped the 70% figure, and added language stating that "continued escalation of trade tensions between China and the U.S. could impact our ability to source these rare earth metals and components."

Yet the company maintained in both filings: "Our supply chain is not dependent on China."

And months after the annual filing, Sridhar went onstage with The Wall Street Journal in June 2026 — where he reiterated, unambiguously, that the company does not source from China.

"I don't know of anywhere else they would get it from that's of the scale that they would need," Eric Wachsman, director of the Maryland Energy Innovation Institute, told Hunterbrook about Bloom's scandium needs. "You have to be able to purify it, and that purification process tends to be primarily in China."

One way Bloom appears to be obfuscating its reliance on China is by rerouting shipments through intermediary countries. This may look better in the trade data, and provide some support for Sridhar's claim that Bloom sources from "multiple countries"

across “multiple continents,” but it doesn’t change the fact that a large chunk of the scandium is still from China: a single point of failure supply chain risk.

And China can cut off that scandium supply regardless of how indirectly it flows to Bloom.

In fact, multiple Chinese scandium suppliers told Hunterbrook that China’s Ministry of Commerce requires end users of scandium — not just exporters — to provide information to the government regarding its planned use for the material. If the Chinese Communist Party does not approve, it can block the exports.

Bloom’s reliance on this supply chain means China may have an off-switch on America’s data center build-out — at least, data centers dependent on Bloom.

After about two decades of losses since its 2001 founding, Bloom recently became a darling of the AI stock boom because fuel cells might provide data centers with behind-the-meter power. Fuel cell financials had been uneconomical, but new grid connections are now taking years, so data centers are willing to pay the premium for quicker time to power. The numbers work even better with the cells now consuming cheap methane instead of more expensive green hydrogen. (Whether Bloom’s original approach was green in the first place is an open question that led to an EPA fine against Bloom and featured in Hindenburg Research's investigation.)

Bloom’s keystone data center deal is an agreement with Oracle ($ORCL) to provide up to 2.8 GW of power for data centers. According to Hunterbrook’s model, there may not be enough scandium on the entire global market to meet the production required for that deal, let alone the rest of Bloom’s backlog — which includes a deal with the Nebius Group ($NBIS), a neocloud backed by Nvidia ($NVDA).

$BE stock nearly quadrupled in 2025 after the news broke of the Oracle partnership — and more than doubled again in the first half of 2026. In total, its share price is up more than 2,000% within two years, with Bloom’s market cap peaking around $100 billion in June, rivaling energy giants like Constellation ($CEG) and Vistra ($VST), on the thesis Bloom can rapidly scale up.

$BE also appeared to be a big winner for Leopold Aschenbrenner’s fund Situational Awareness, though the fund sold over a third of its disclosed $BE position in its most recently reported quarter, even as its assets under management soared.

But can Bloom actually deliver enough fuel cells?

The answer to that question may explain the reason for the company’s repeated insistence on its independence from China.

On its scandium sources, Bloom has told investors: “We don't reveal those sources and methods. That's part of our IP."

But Hunterbrook reconstructed the global scandium supply chain — identifying the few active projects and evaluating potential future sources. The newsroom also reviewed patents, market data, and academic and industry research to estimate Bloom's consumption.

The conclusion was clear: Bloom lacks enough scandium for its lofty ambitions and timeline.

The model's math aims to be conservative. Rather than counting only current production, it gives partial credit to meaningful planned production, including generous assumptions about the likelihood and speed with which pre-commercial projects can ramp up. It also assumes the existing growth rate of scandium consumption by other customers will hold steady, despite wider adoption across aerospace, military, and automotive industries. The model also considers the case in which Bloom has engaged in significant "thrifting" (essentially recycling scandium from used fuel cells) and innovating to consume less scandium, though it does not assume needle-moving stockpiling for reasons described below.

Bloom did not respond to repeated requests for comment about its scandium supply. Instead, the day before publication, its COO posted a blog asserting Bloom's supply chain "can support up to 25 GW per year," without providing evidence. Bloom said it "maintains strict confidentiality around its sourcing network" — supplier relationships and sourcing volumes are "proprietary" — "to protect the resilience of our supply chain."

Bloom then cautions readers to read its "full disclosures, including information on potential risks and uncertainties that may impact Bloom's business, set forth in its periodic reports filed with the SEC."

Hunterbrook's data demonstrates that without Chinese scandium, even if every new non-Chinese project meets current timelines, adjusted for the risk it slips, in 2030 there would only be about 60 tons of scandium oxide that's not already contracted by other customers like Lockheed Martin.

Bloom needs about 220 tons to power 5 GW and fulfill unit replacements. Even with Chinese supply, the data indicates there will not be enough available scandium to meet Wall Street's expectations for Bloom.

If Bloom can't deliver enough fuel cells, it wouldn't be the first time the company's claims didn't match reality. In the 16 years since Sridhar debuted Bloom to a national audience on 60 Minutes, its statements about cost, hazardous waste, ratepayer fees, and fuel cell life have been contradicted by the record, including state filings, federal enforcement findings, and Bloom's own SEC disclosures.

Each time, the better number came first and the correction came later, in a clawback, a penalty, or a restatement.

This time, it's not just the scandium supply numbers that don't add up. It's also the demand for Bloom's products.

Bloom's recent string of record-setting quarters rests on fuel cells sold to financing vehicles the company itself part-owns with the financier Brookfield, but the orders don't appear to be turning into operating data centers.

And since Bloom's last guidance update, two flagship destinations have recently slipped by years.

Project Jupiter in New Mexico has no approved air permit and a gas pipeline stuck at FERC. In May, the industry publication SemiAnalysis estimated first power at the site in 2029. Meanwhile, Bloom's fuel cell deal with the utility AEP — apparently tied to a hyperscaler plant outside Cheyenne, Wyoming — slid from "no later than year-end 2028" to "no later than 2030," according to AEP investor slide decks.

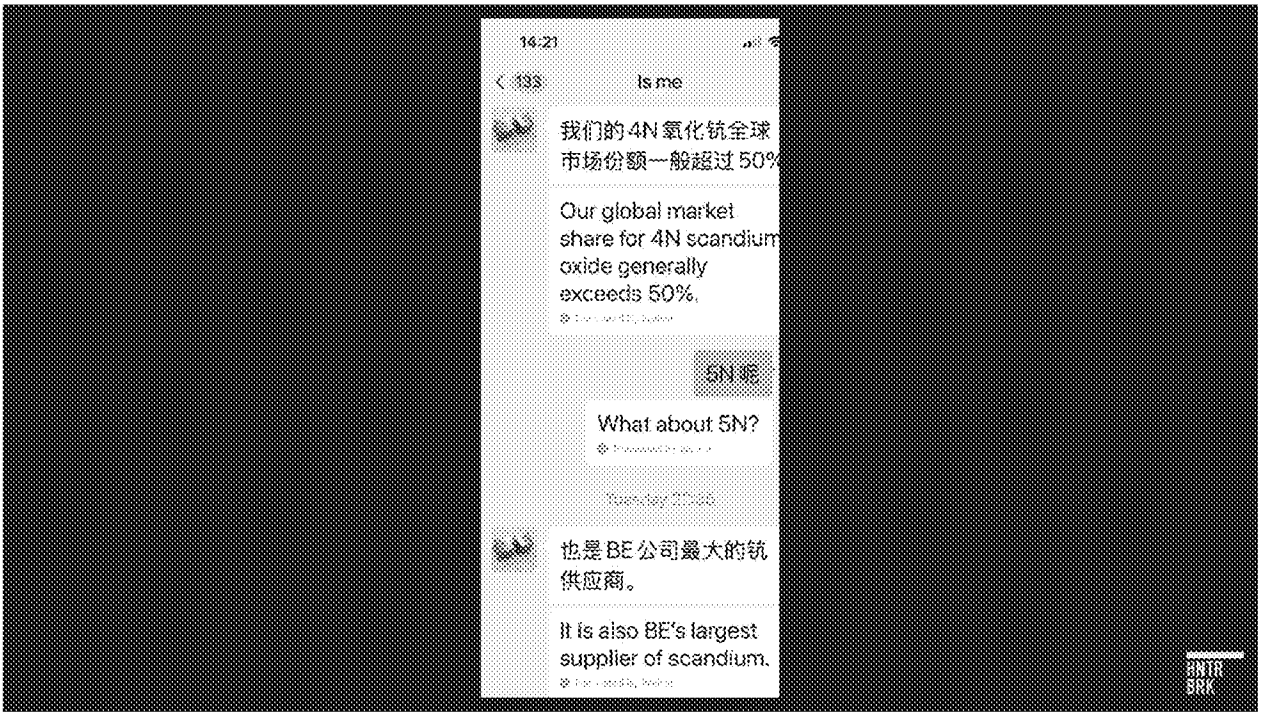
The roughly $20 billion backlog Bloom markets to investors is more than 40 times the $492.6 million in binding contractual obligations disclosed in its most recent quarterly filing. Across peers Hunterbrook analyzed, from turbine makers to hyperscalers, the widest comparable gap was about two times. This, at a company that has run through four finance chiefs since the start of 2024 — and five since 2020.

The scandium shortage and the demand gap converge on a single debate: whether the 5 GW ramp key to Bloom's valuation is real, or whether it's just the latest Bloom story that turns out to be too good to be true.

Inside The China Supply Chain Bloom Said It Didn't Have

Hunan Oriental Scandium is a major scandium producer in China. When a Hunterbrook reporter reached out about shipments to the U.S., a representative listed the company's credentials.

"Our global market share for 4N scandium oxide generally exceeds 50%," they wrote, adding: "We are also BE's largest supplier of scandium." BE is the ticker symbol for Bloom Energy.

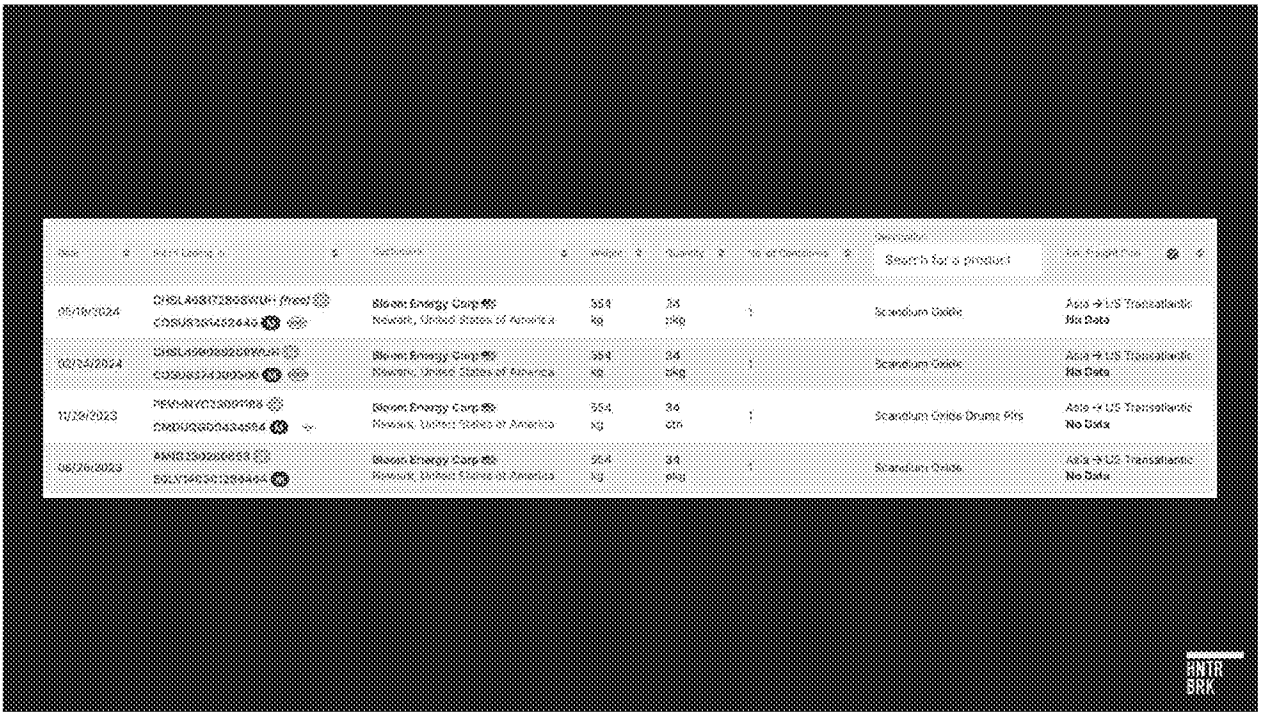


Messages from a recent online chat with representatives at Hunan Oriental Scandium. Source: Hunterbrook Media

A bold claim by the Chinese supplier, as Bloom's CEO said his company has no China supply chain.

But trade data and company announcements corroborate longstanding ties between Bloom and Hunan Oriental, which is a subsidiary of LB Group, a large Chinese chemicals company.

Hunan Oriental shipped scandium oxide directly to Bloom in Newark, Delaware, at least four times between August 2023 and May 2024, according to commercially available trade data. The product descriptions include "scandium oxide" and "scandium oxide drum pits."



Hunan Oriental Scandium's shipments to Bloom between August 2023 and May 2024. Source: ImportYeti trade data.

Bloom also visited the same supplier a few months after the first of these shipments.

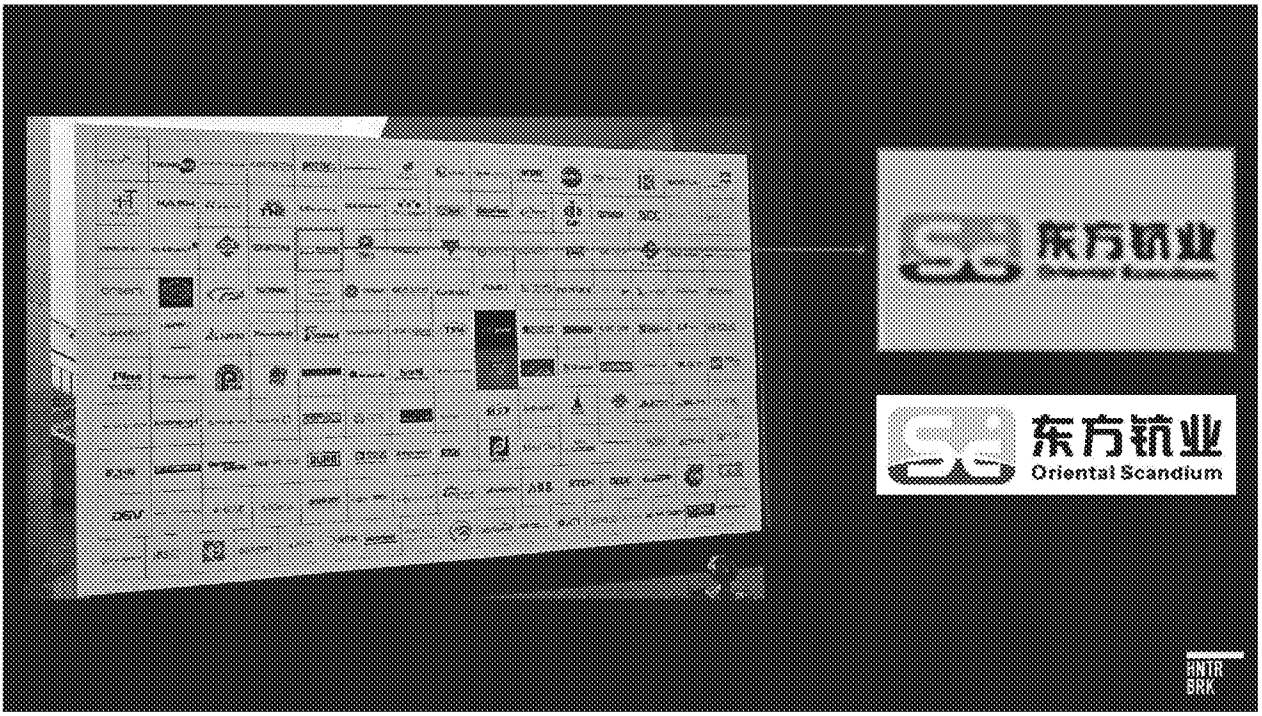
On November 2 and 3 in 2023, a Bloom delegation from the U.S. visited Henan Rongjia Scandium-Vanadium, a "wholly-owned subsidiary of Hunan Oriental Scandium," for an "inspection and exchange," according to a Chinese-language company account. The Bloom delegation included a product manager, chief engineer, senior staff engineer, supply-chain procurement manager, and quality manager.

The delegation toured LB Group's "exhibition hall, corporate technology center, and Rongjia's scandium oxide production workshop," the company said in a press release.



Photo from a post on Hunan Oriental Scandium's website about Bloom Energy's visit to Rongjia Scandium Vanadium's plant in November 2023. Source: Hunan Oriental Scandium

A photo taken at Bloom's 2026 supplier conference in May and posted to LinkedIn appears to confirm the relationship between the two companies has continued: It shows Hunan Oriental Scandium's logo.



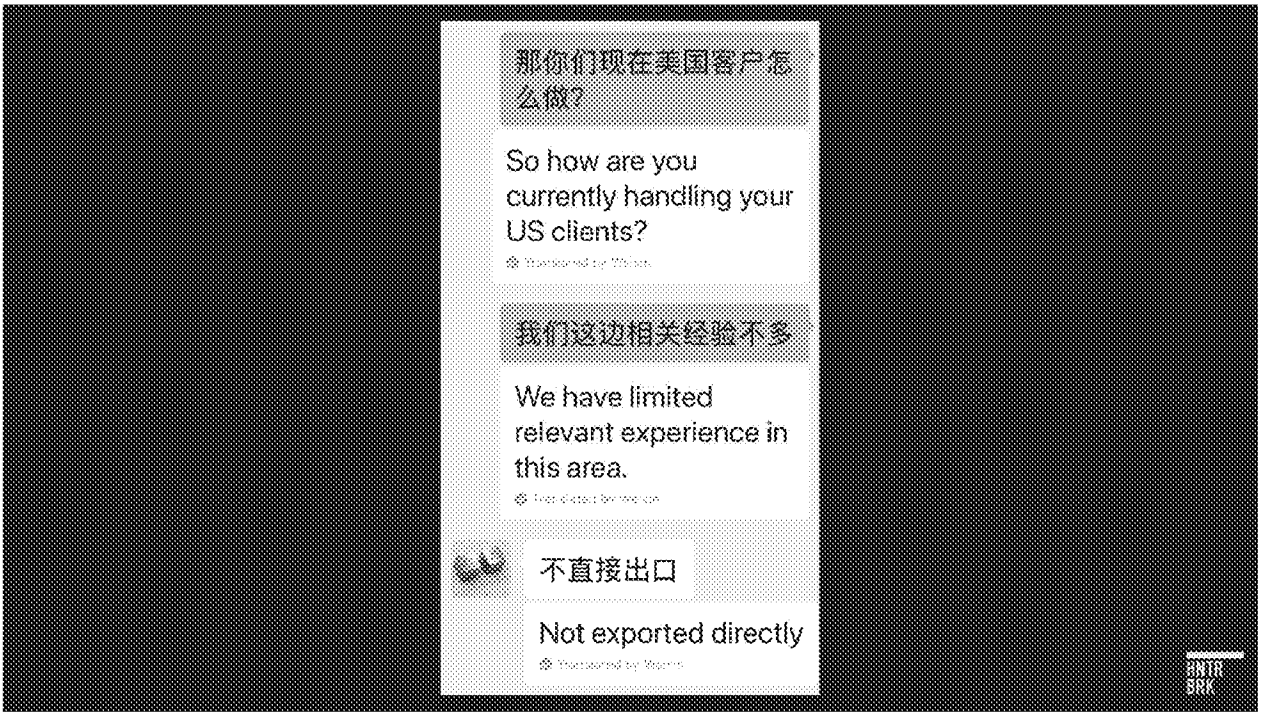
Hunan Oriental Scandium's logo shown at Bloom's 2026 supplier conference in May, posted to LinkedIn. Red box and arrow added by Hunterbrook. Source: LinkedIn

But while Hunan Oriental claims to be one of Bloom's top suppliers, no further shipments to the fuel cell manufacturer appeared in that trade data, after the scandium deliveries in 2023 and 2024.

So how does the material reach Bloom now, especially given the tighter Chinese export controls on rare earths that took effect in 2025?

When the Hunterbrook reporter asked the Hunan Oriental sales rep how the company is sending its scandium to U.S. customers, the response was blunt.

"Not exported directly," they wrote.



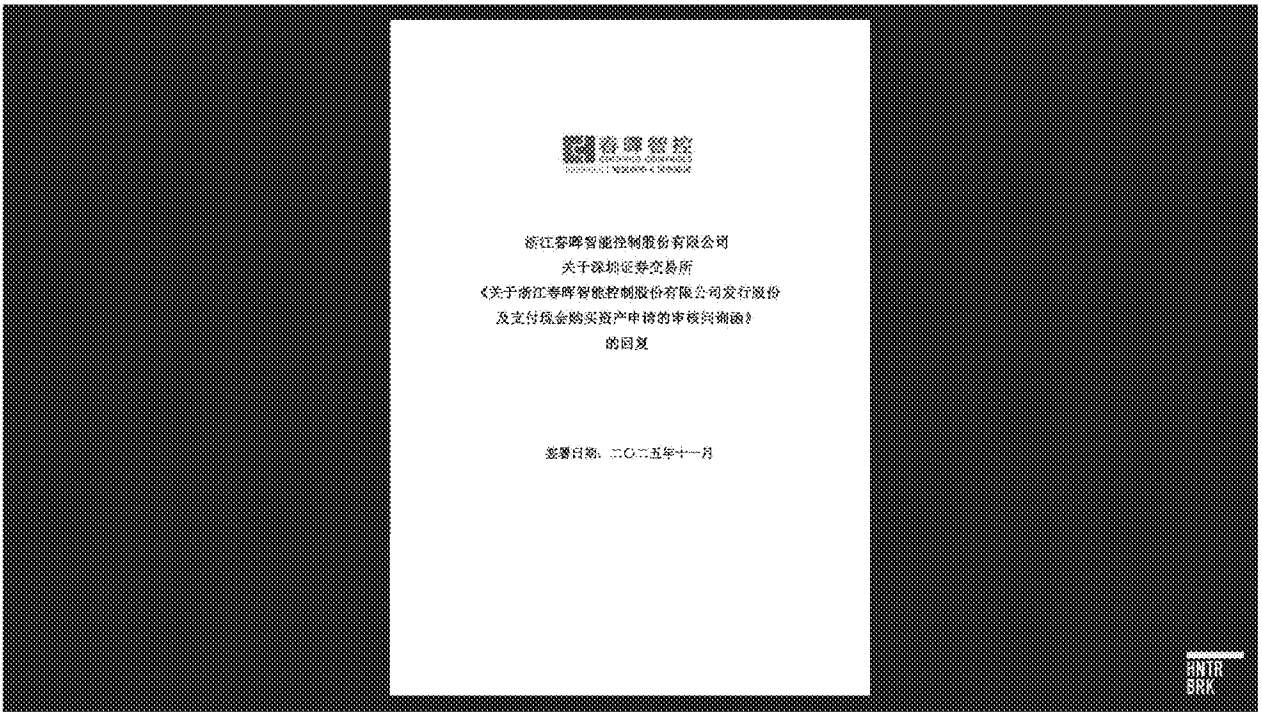
Messages from a recent online chat with representatives at Hunan Oriental Scandium. Source: Hunterbrook Media

The Playbook — And the Money Running It

A Chinese securities filing gives insight into Bloom's supply chain playbook and how one of its partners has apparently obfuscated Bloom's reliance on Chinese products.

Zhejiang Chunhui Intelligent Control, a Chinese manufacturer, has supplied Bloom with the temperature sensors that monitor its fuel cell stacks since 2007. In a November 2025 disclosure to the Shenzhen Stock Exchange, reviewed and translated from Chinese by Hunterbrook, Chunhui describes itself as Bloom's dominant sensor supplier, accounting for more than 70% of the American company's purchases of the part over a roughly two-decade relationship.

The sensors are not scandium. But the filing lays out, in Chunhui's own words, how Bloom is trying to limit its exposure to Chinese trade. Bloom "has begun changing its supply-chain process" — directing Chunhui to ship its products not to the United States, but to Bloom's "other overseas suppliers," who "complete assembly before shipping on to the United States," in order to "gradually reduce direct exports to the U.S. and thereby mitigate the impact of U.S. tariff policies."



The cover sheet of Chunhui's financial filings. Source: Chunhui Controls

The Chinese filing even names Bloom's waypoints.

Starting in 2025, Chunhui began routing its Bloom-bound product through Kaori Heat Treatment in Taiwan and MTAR Technologies in India. Both are Bloom suppliers. The trade data matches: Chunhui's direct deliveries to the U.S. fall during this period and become sporadic, while the weight of shipments from Kaori and MTAR to Bloom increases significantly.

Chunhui's direct sales to Bloom dropped from roughly 31% of its revenue to under 13% as the rerouting took hold.

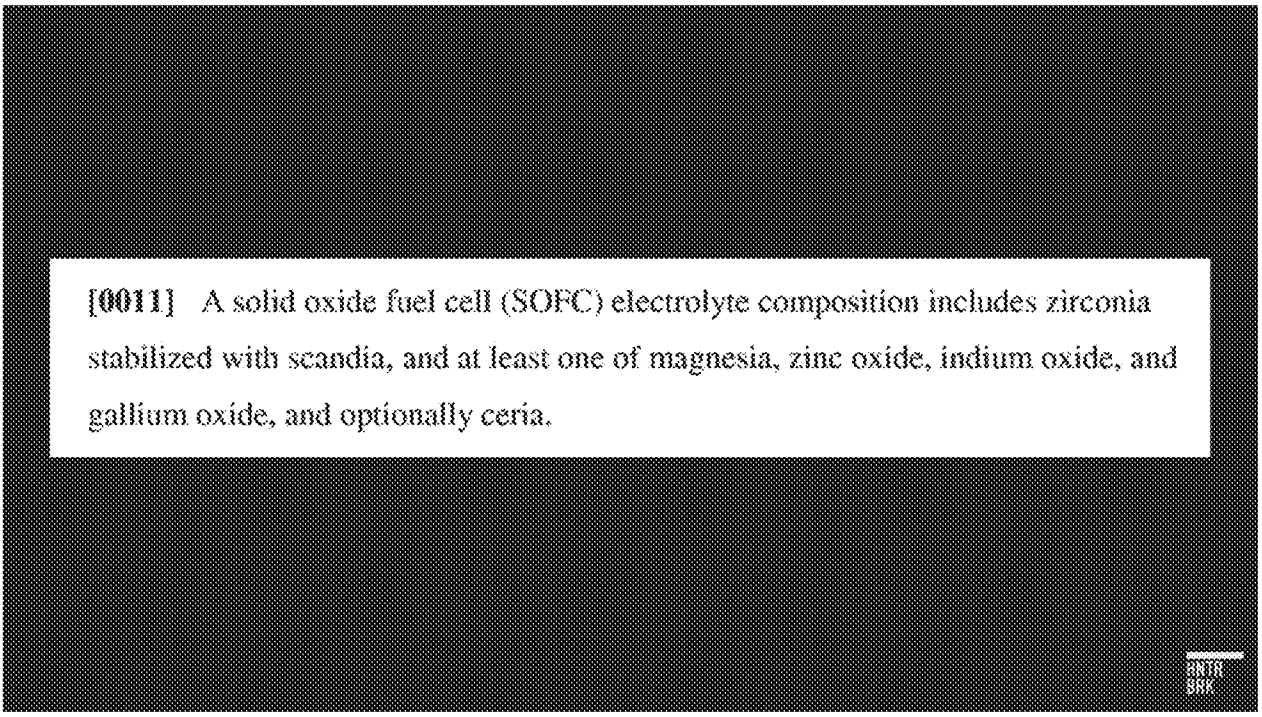
Bloom's recent 10-K disclosure appears to confirm that the company is using the same playbook with rare earth metals and compounds from China by routing them to the company's "tier 2 and tier 3 sub-assembly suppliers."

Hunterbrook looked at Bloom's shipments over the past two years to uncover the waypoints through which Bloom receives Chinese scandium. We identified three trade routes that appear to obscure the Chinese origin of Bloom's scandium imports.

Route 1: A Major Chinese Supplier's Thai Subsidiary

According to the import data we reviewed, Glory Winner (Thailand) Co. Ltd. shipped more than 154 metric tons of ceramic electrolyte membranes to Bloom between July 2024 and November 2025. Glory Winner is a subsidiary of China's Three Circle Group, which has been identified as a "core supplier" for Bloom in Chinese media.

Scandium is a key component of the ceramic electrolyte membranes in Bloom's fuel cells, per the company's own patents and multiple fuel cell experts interviewed by Hunterbrook.

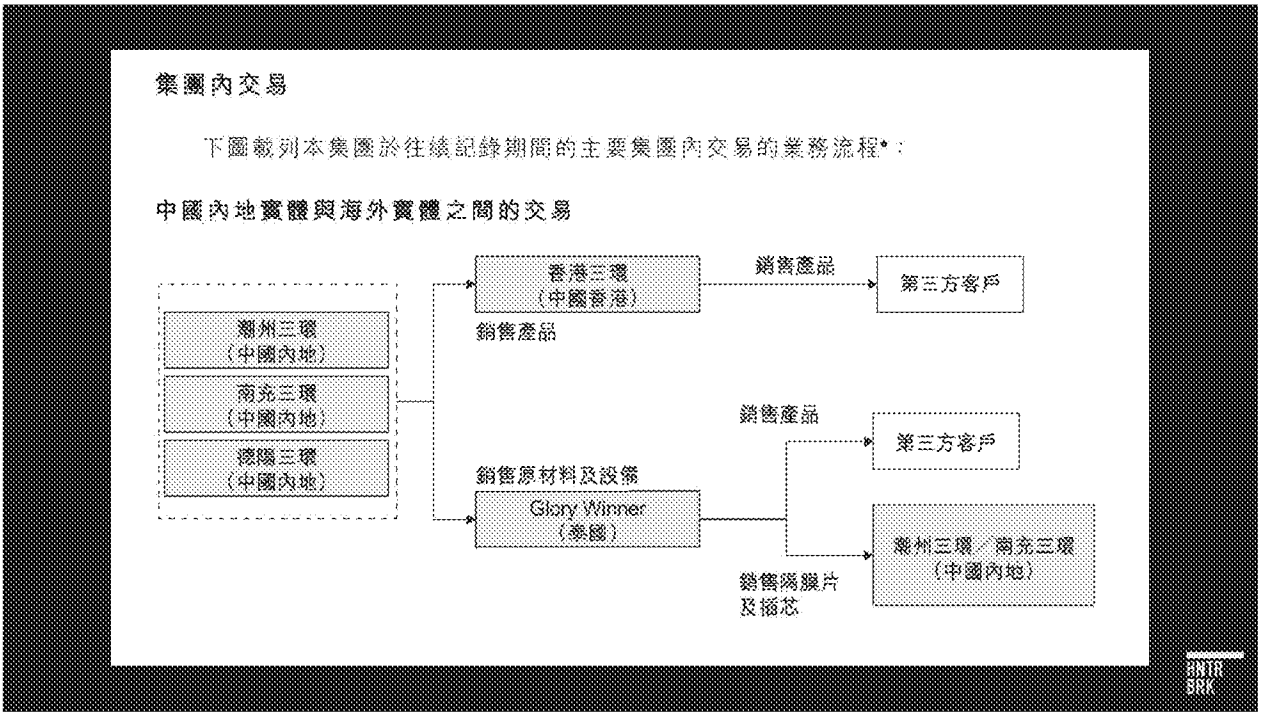


An excerpt from one of many Bloom fuel cell patents relying on "scandia." Source: Bloom patent.

The United States Geological Survey (USGS) does not list Thailand as a scandium producer.

So while Bloom's scandium-containing parts sourced from Glory Winner may not be shipped directly from China, trade data and Chinese industry coverage indicate that they are in fact of Chinese origin.

A diagram in Three Circle's 2026 draft IPO prospectus for the Hong Kong Stock Exchange shows that the company's China-based operation is supplying "raw materials and equipment" to Glory Winner. Elsewhere in the document, Three Circle says "the main raw materials are all sourced domestically," referring to China.



A diagram in Three Circle's 2026 draft IPO prospectus showing a transfer of "raw materials and equipment" from Three Circle's China operations to Glory Winner. Source: HKEXnews

Three Circle's 2021 response to a Shenzhen Stock Exchange inquiry letter suggests that this trade route was set up in 2019 and designed to avoid U.S. tariffs.

"To mitigate the impact of the additional tariffs on fuel cell separator plates, the company consulted with relevant customers and implemented the following measures," the document states. "In July 2019, it established a new subsidiary, Glory Winner (Thailand) Co., Ltd., and relocated the fuel cell separator plates business to Thailand, assigning production and sales responsibilities to the new subsidiary."

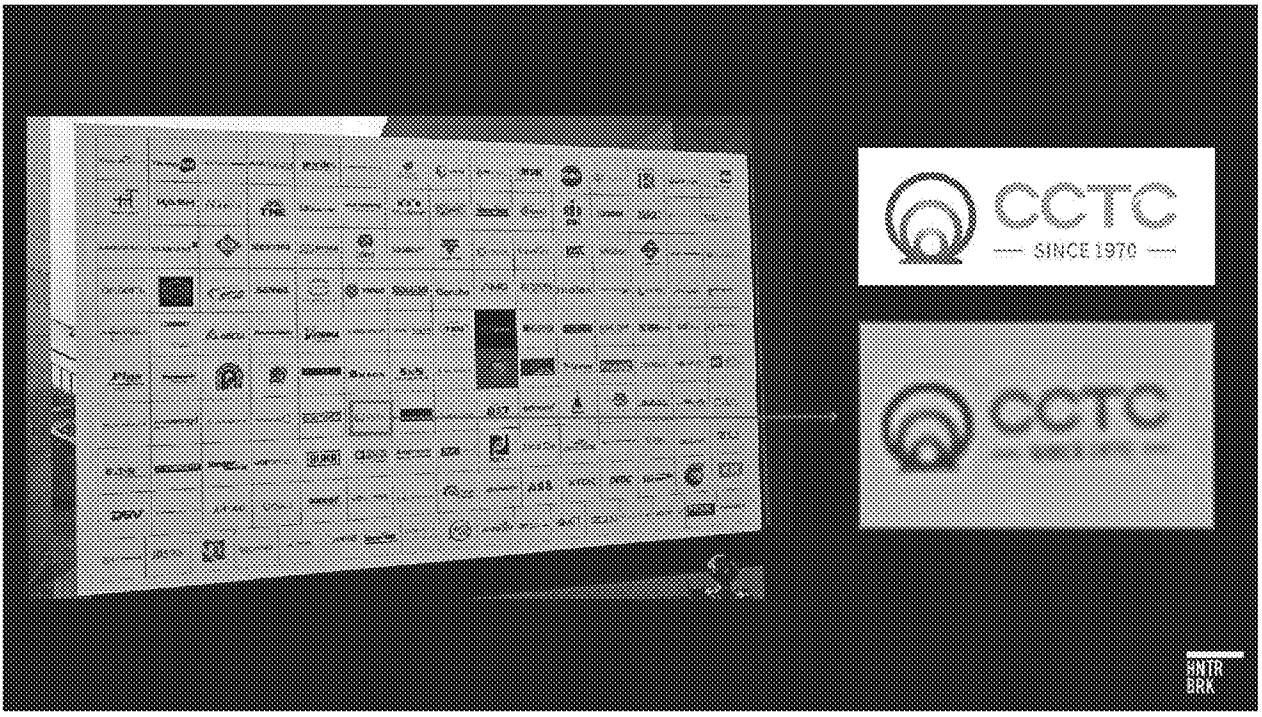
But Three Circle did not always use the Thai route.

Trade data shows a related entity, Hong Kong Three Circle Electronic, shipping "ceramic substrate for fuel cell application" directly to Bloom under its own name between 2024 and 2025.

Glory Winner hasn't shipped to Bloom since November 2025 according to the trade data, over six months after the Bloom CEO's repeated denial of reliance on Chinese scandium during the earnings call. But Three Circle told investors as recently as December that it "has established a long-term cooperative relationship with Bloom Energy and is its main supplier of fuel cell membrane sheets," according to Chinese media.

The company, which happens to be listing in Hong Kong this week, did not name Bloom directly in its IPO prospectus. Instead it said its largest customer in 2023, 2024, and 2025 is a "public company listed in the U.S. that mainly engages in development and production of reliable new energy products." It also disclosed: "SOFC electrolyte sheets have been supplied to a leading North American fuel cell company."

Similarly to Hunan Oriental Scandium's logo, Three Circle's logo appeared on a logo wall at Bloom's May 2026 supplier conference, indicating the two companies are still doing business together.



Three Circle's logo shown at Bloom's 2026 supplier conference in May, posted to LinkedIn. Red box and arrow added by Hunterbrook. Source: LinkedIn

But while the apparent rerouting through Three Circle's Thailand subsidiary might help evade U.S. tariffs, it likely will do nothing to mitigate Beijing's export control choke point, as Hunterbrook's conversation with Hunan Oriental indicated.

When Hunterbrook asked Hunan Oriental about procuring via an intermediary in a third country, the company's representative walked through the rigorous disclosure requirement that included explicit disclosures from the end user, including financial information, as well as business scope and main products produced. The ultimate end user had to directly provide the information to the exporter before the product could be shipped.

“Whether the declaration is approved depends on the Ministry of Commerce’s review of the buyer and the intended use of the products,” the rep said, adding the process typically takes 45 days.

The requirements also include a commercial inspection, the rep said.

“No step can be skipped.”

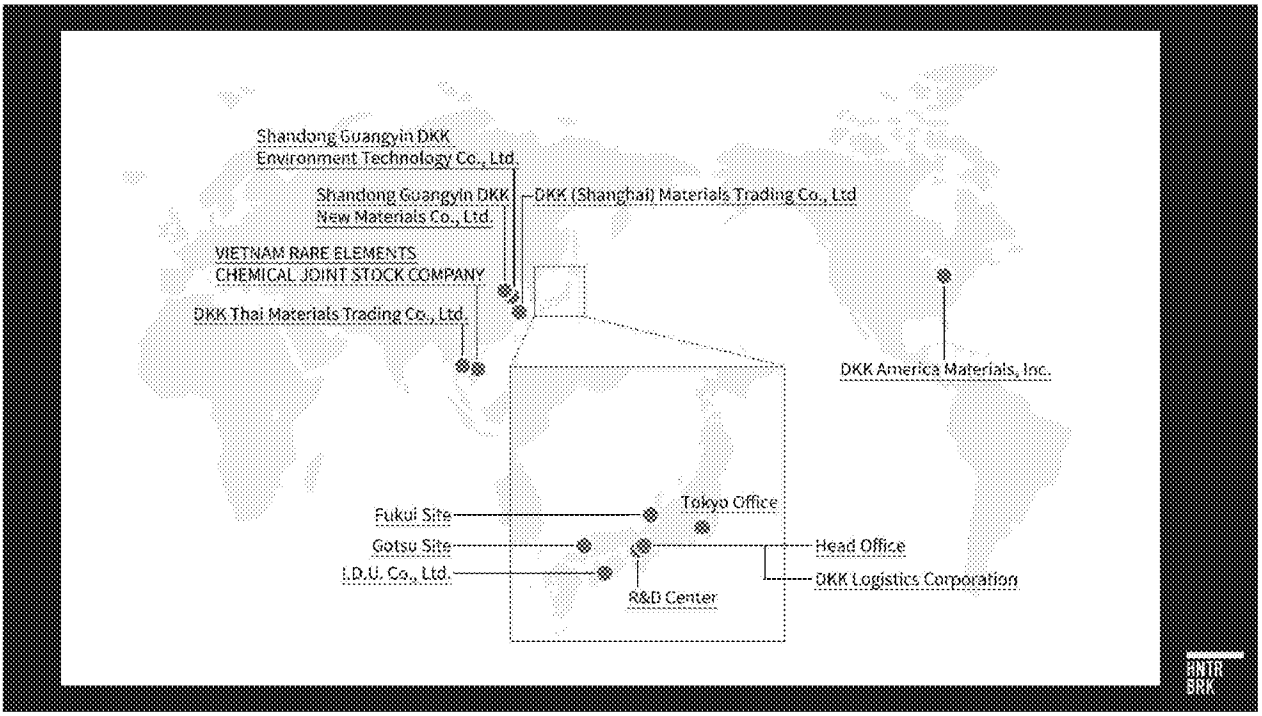
It’s a rigorous process. So rigorous that Hunan Oriental’s second representative had questions about the end user for the sale it was discussing, asking Hunterbrook’s journalist: “Isn’t this company an investigative financial media outlet based in New York, USA?”



A message from a recent online chat with representatives at Hunan Oriental Scandium. Source: Hunterbrook Media

Route 2: A Japanese Supplier’s Chinese Trading Arm

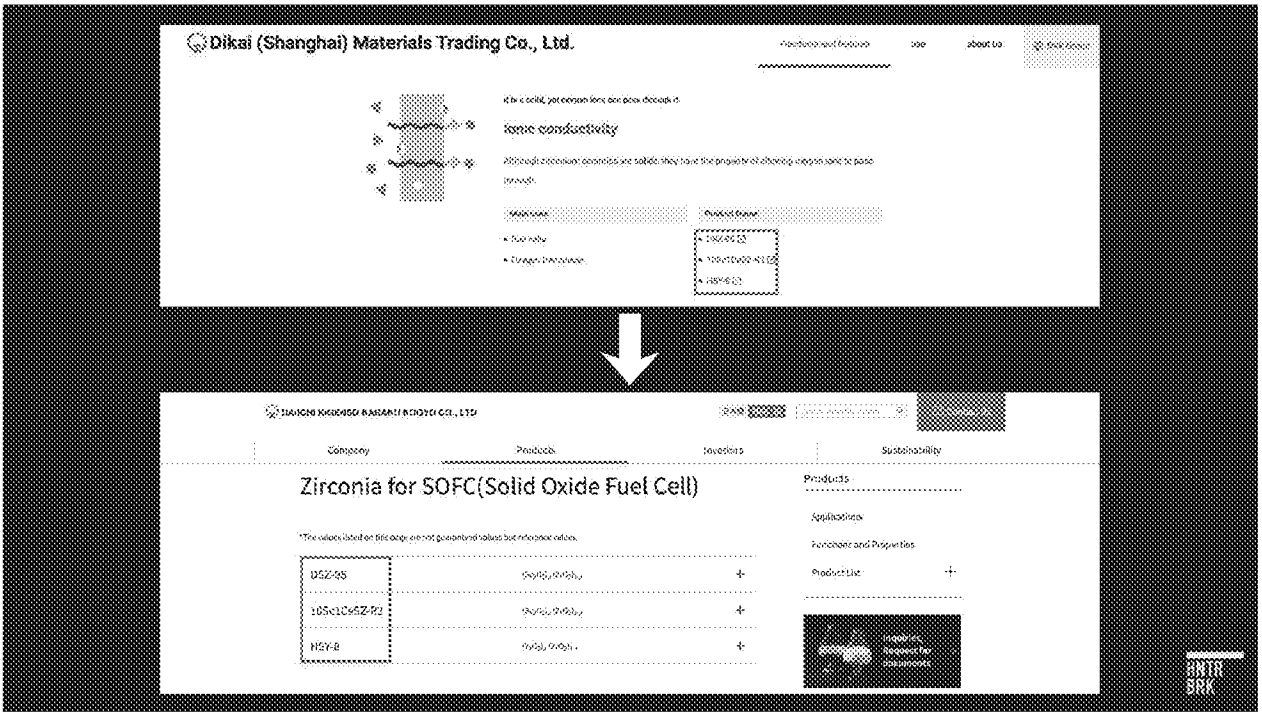
Bloom also receives "scandia-stabilized zirconia powder” from Daiichi Kigenso Kagaku Kogyo (DKK) in Japan, according to import records reviewed by Hunterbrook. The powder is the raw version of the critical material the fuel cell manufacturer needs for its electrolytes. Since September 2024, Bloom has received almost 300 drums of “scandia” or “scandia-stabilized” powder, though not all was labeled as zirconia powder. While they were shipped from Japan, a look at DKK’s corporate structure suggests the powder’s actual provenance is China.



DKK Group's corporate network. Source: DKK website

The Japanese materials manufacturer's corporate network includes two Chinese "associated companies" and one Chinese subsidiary, DKK (Shanghai) Materials Trading, which specializes in zirconium compounds.

Its website features scandium prominently. The product page links to DKK's Japanese website of zirconia for solid oxide fuel cells, the type of scandia-stabilized zirconia powder Bloom bought from DKK, suggesting the Japanese company sources from its Chinese subsidiary.



DKK's Chinese subsidiary (top) lists solid oxide fuel cell zirconia powders and links to the group's Japanese site (bottom), the part of the company Bloom purchased powders from. Source: DKK website

A possible non-Chinese source of scandium for a Japanese supplier is Sumitomo Metal Mining, which recovers scandium as a byproduct at its nickel operation in the Philippines and refines it into scandium oxide in Japan. Sumitomo Metal Mining said in 2016 that it had signed a long-term scandium supply deal with an unnamed "major U.S.-based fuel cell manufacturer," widely believed to be Bloom.

But that operation has remained small. Philippine government data from the Mines and Geosciences Bureau's Caraga office shows scandium oxalate output from the region that hosts Sumitomo's Taganito operation hasn't meaningfully exceeded 8 tons in a year in scandium-*oxide* equivalent (there's about 1 ton of usable scandium *oxide* from each 3 tons of scandium *oxalate*). Sumitomo said in May that it planned to increase scandium production capacity, and Japanese press reported the increase at about 20%. That's a fraction of what Bloom needs. The USGS does not list Japan among countries where scandium resources have been identified.

That leaves DKK's Chinese subsidiary as a more probable origin of the powder shipped from Japan.

In recent financial filings, DKK does not mention scandium specifically, but the company flags that for "medium-to-heavy rare earths, production is heavily concentrated in China, and the impact of export restrictions persists."

A 2026 DKK-commissioned analyst report expressly flags that the company uses

scandium oxide in “zirconia for fuel cells” and that the material is subject to Chinese export controls, suggesting once again that the company is sourcing it from China.

Route 3: Through Bloom's Partners in South Korea

In 2024, Korean media reported a local success story. The company KV Materials had effectively localized the production of “electrolyte raw materials and powder” in Korea and would supply these products to Amosense, “a company specializing in materials and components,” to be turned into electrolyte substrates.

Subsequent industry coverage confirmed which trade partner Amosense was producing these components for: “Amosense will accelerate earnings growth by gradually expanding supply volumes following the shipment of the initial batch of solid oxide fuel cell (SOFC) ceramic substrates for Bloom Energy, which was prepared in the first week of March,” Daily Invest reported.

The shipments seem to be ultimately headed to the U.S. to be used for Bloom’s data center push, according to Korean news reports: “As Bloom Energy's orders expand due to the surge in demand for AI data centers, Amosense's ceramic substrate production capacity is also expected to expand more than threefold to approximately 50 billion won by the third quarter of this year,” Pinpoint News wrote.

Bloom’s ceramic electrolyte substrates contain scandium, according to its patents. But the USGS doesn't list South Korea as a nation in which scandium resources have been identified, meaning the scandium baked into the Korean ceramic electrolyte substrates Bloom bought had to come from somewhere else.

The most likely place seems to be China. KV Materials, which provides the “electrolyte raw materials,” is actually owned by Vital Thin Film Materials, a Chinese scandium-products maker and part of Vital Group, corporate records show.

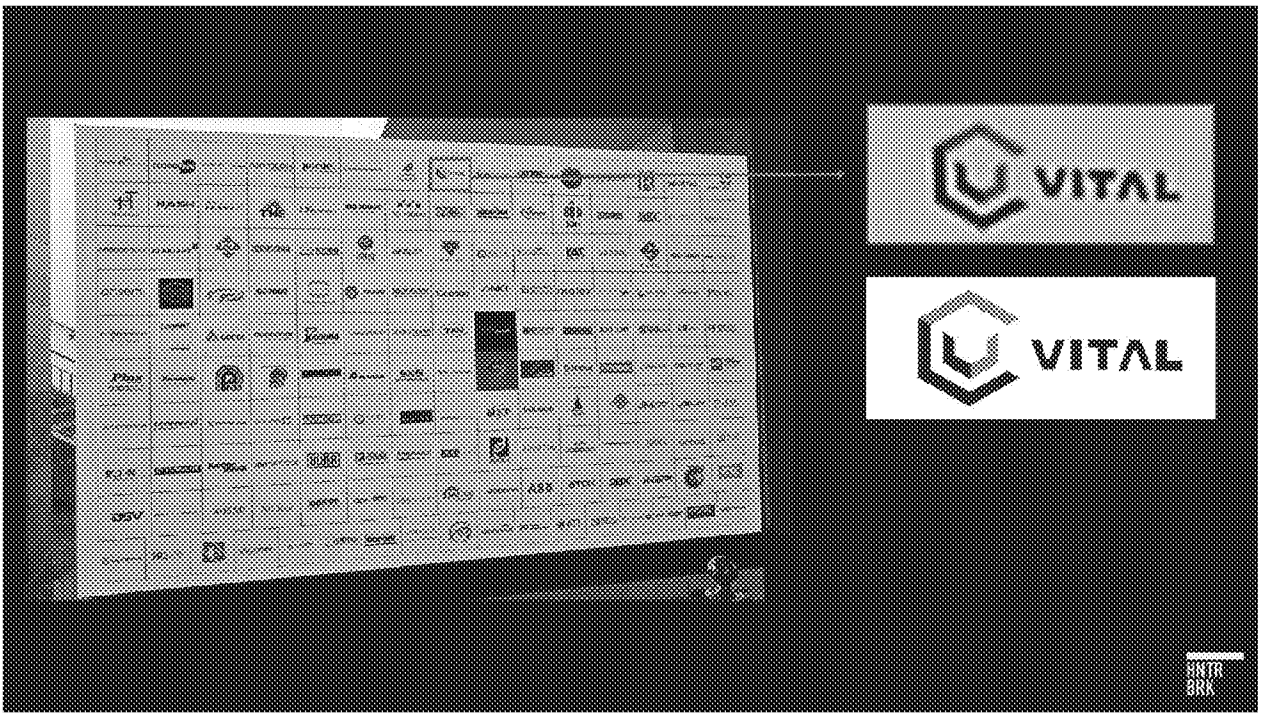
In January 2024, a Korean newspaper reported that Vital Group had shifted part of its fuel-cell business into the subsidiary with 20 billion won invested into the production. KV's CEO pledged to make the company "a core hub of Vital Group."

According to filings in Korea’s corporate disclosure database, KV Materials spent 127 billion won ($83 million) purchasing from its parent company, Vital’s Hong Kong subsidiary, in 2025.

If the scandium powder feeding Bloom traces back to a Chinese parent, then Bloom's Korean operation would not take China out of the supply chain. It would transform the scandium and obscure its ultimate origin, turning Chinese-sourced scandium into a Korean electrolyte substrate before it reaches the United States.

Vital itself appears to be one of Bloom’s key suppliers. Its logo showed up on the same wall at Bloom’s May 2026 supplier conference as Hunan Oriental Scandium’s and

Three Circle's logos.



Vital's logo shown at Bloom's 2026 supplier conference in May, posted to LinkedIn. Red box and arrow added by Hunterbrook. Source: LinkedIn

Bloom even seemed to have bestowed a special honor on the company: Vital apparently received the "Impact Supplier Award 2025." The award is given to a supply partner who "significantly advanced our operational success, strengthened resilience and enabled scalable growth across the value chain," according to a video Bloom posted on its LinkedIn page.

Vital's North American subsidiary, Vital & FHR North America, has been a known Bloom supplier since 2023 — but the Chinese company's apparent involvement in Korean electrolyte substrate production for Bloom has not been reported before.

The Ties That Bind

Bloom's scandium supply chain seemingly has at least four separate links to China: via Hunan Oriental, Japan, Korea, and Thailand.

And Chinese records show Bloom's relationship with Chinese scandium suppliers goes back more than a decade, despite the CEO's claims that Bloom has avoided the country since as early as 2005 and never had to "decouple" from China.

In May 2009, Bloom personnel visited China and Bloom signed a cooperation-intent contract with Hunan Rare Earth Technology Development Co. to jointly invest in a rare earth materials production line for Bloom's fuel-cell division.

According to an April 2010 Chinese media report, Liu Jiaxiang, the director of the Hunan Rare Earth Metal Materials Research Institute, said that Bloom used the institute's scandium for its fuel cell modules. "For the previous one or two decades, Bloom's research had not been successful, but the positive electrode made with high-purity scandium oxide reduced the reaction temperature of the fuel cell by more than 200 degrees Celsius," the article says.

In 2012, a Chinese recruitment notice described Taojiang Ruilong Metal New Materials Co., Ltd. as a joint venture between Hunan Rare Earth Metal Materials Research Institute and Bloom. The company's business included crude scandium enrichment, high-purity scandium oxide production, and key fuel-cell materials.

And a 2013 Chinese industry-news article said a state research team led by the Beijing General Research Institute for Nonferrous Metals built a 20-ton-per-year high-purity scandium oxide line in cooperation with Bloom Energy.

Bloom acknowledged that its products rely "on a rare earth mineral" from suppliers "primarily located in Asia" several times in SEC filings between 2016 (pre-IPO draft registration statement) and 2019, before removing the mention altogether. The company also repeatedly flagged that it was sourcing from China before 2023 and then apparently dropped Chinese supply chain disclosures from its reports — before they reappeared in its quarterly filing for the third quarter of 2025.

At one point, Bloom appears to have tried to reduce its reliance on Chinese scandium by starting its own U.S. scandium extraction operation. According to an SEC filing ahead of its 2018 IPO, the company disclosed that "a subsidiary of the Company operated a scandium mining operation in the state of Montana pursuant to a lease." That lease was terminated in April 2016. "The operation did not involve any actual mining, but rather entailed a physical treatment to upgrade the scandium concentration in tailings left on the mine's surface from past mining operations not related to the Company," Bloom states in the SEC filing.

Corporate records seem to indicate that this subsidiary was Rye Creek LLC, which reprocessed tailings from the Crystal Mountain in Darby, Montana. The company is still active, according to Montana's corporate registry. It's unclear why the Montana mining operation shut down, but this apparent attempt to build a domestic supply chain did not come to fruition.

It's not just scandium-containing components that Bloom is sourcing from China: A Chinese sell-side analyst report from June also lists various other Chinese companies as Bloom suppliers, for goods ranging from electrolyte separator sheets to interconnects, magnetic components and temperature sensors. Trade data indicates that Bloom

received shipments from a Chinese company as recently as Monday.



Chinese sell-side report listing Chinese Bloom Energy ("BE") suppliers. Source: Soochow Securities

This is not necessarily surprising. Almost every hardware company has China in its supply chain. But it's strange considering one of Bloom's key selling points — one its CEO highlighted in an interview with the Wall Street Journal last month — is that it does not rely on China.

Show Me the Scandium

The math explains why Bloom can't escape China.

Between its founding in 2001 and 2024, Bloom had deployed a total of approximately 1.4 GW of fuel cells. By 2030, Wall Street is modeling the company scaling to production of up to 5 GW *per year,* driven by the AI boom.

That's a big scale up.

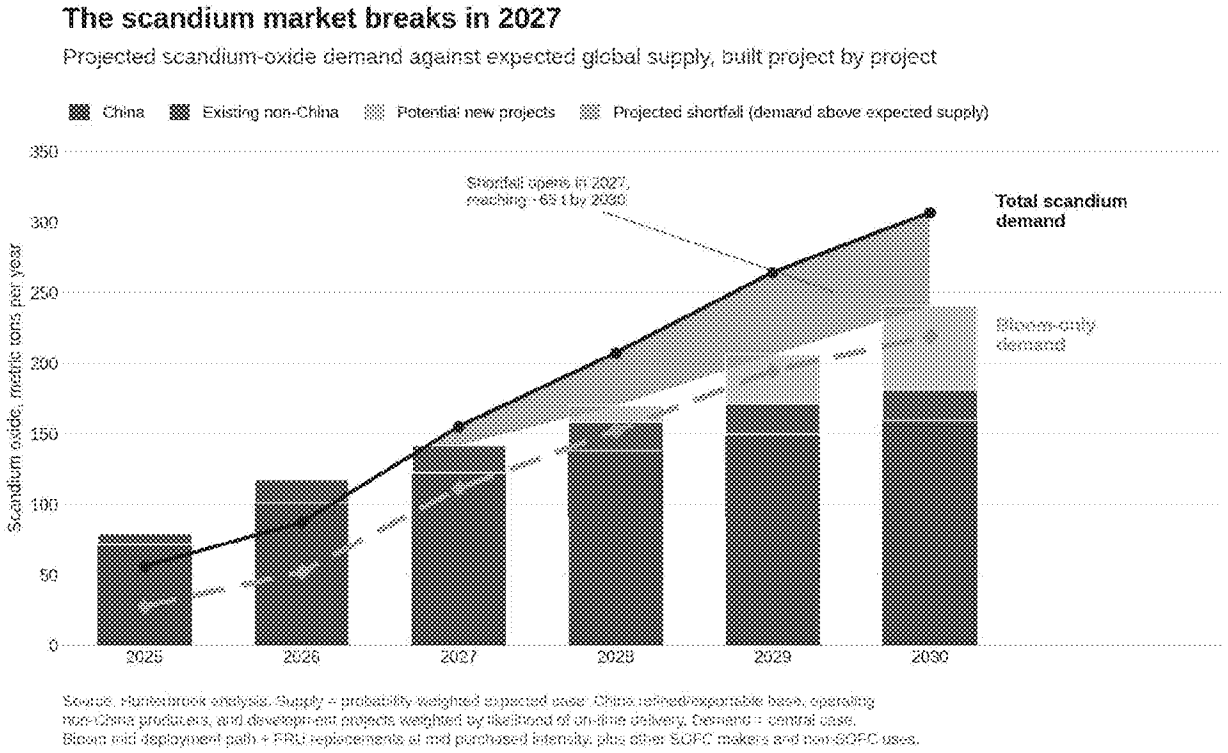
How big?

Hunterbrook ran an extensive calculation of scandium supply and demand each year from 2025 through 2030. The deep dive included assessing every identifiable source of potential scandium production and consumption we could find worldwide. All calculation inputs directly cite government filings, Bloom patents, peer-reviewed

APP82

academic literature, satellite imagery, company statements, and other independent sources.

The takeaway: Reliance on China isn't even Bloom's biggest problem. There won't be enough scandium in the world — let alone outside of China — to meet Bloom's needs across several years.



Hunterbrook's modeling shows Bloom's projected scandium demand outpacing the total global supply starting in 2027, accounting for estimated and announced production ramp-ups worldwide. The model is based on company disclosures, analyst assessments, government filings, Bloom patents, and expert interviews. Source: Hunterbrook

Here's the math.

Demand

Bloom won't say how much scandium it needs for its fuel cells. The public record is full of misinformation.

The Wikipedia page on the Bloom Box, for instance, claims the company requires just "130kg–150kg of scandium per GW," a figure orders of magnitude lower than the public estimates reviewed by Hunterbrook. The number was added earlier this year by an anonymous editor with no source, and the page's only scandium citation was flagged as an AI-generated reference.

Even employees have been kept in the dark, a former senior engineering manager told Hunterbrook. "They were very, very quiet about what they did, what they created, what

they added," they said about scandium. "There wasn't really any understanding of what that was, where they were getting it from, what they needed to secure."

So Hunterbrook built the number, measured in metric tons, from scratch, using two independent methods that converge.

Method 1: Count the Atoms

Bloom's electrolyte is a ceramic material made from scandia-stabilized zirconia. In a solid oxide fuel cell, the electrolyte separates the anode and cathode and conducts oxygen ions; at the anode, those ions react with natural-gas-derived fuel in an electrochemical process that produces electricity without combustion.

The high operating temperatures of fuel cells mean that plain zirconium oxide won't hold the right crystal structure as it cools: It cracks and loses conductivity. So you "stabilize" zirconia by mixing in another oxide. Bloom chose scandium oxide, which has superior properties to alternatives like yttria.

Bloom's patents describe that mix at around 10 mol%.[1] That means that out of every 100 oxide molecules in the ceramic, 10 are scandia and 90 are zirconia. Because a scandia molecule is a bit heavier than a zirconia molecule, 10 mol% works out to roughly 11% of the electrolyte by weight.

That's the recipe. The next question is how much ceramic electrolyte each cell actually contains.

A 2021 Bloom technical deck put the company's electrolyte at a 100-micron thickness, producing 25 watts per cell. Bloom repeated the same watt figure in a 2022 deck. Hunterbrook modeled each cell at roughly 100 square centimeters of active electrolyte area, nearly identical to the 99-square-centimeter active-area input in a Department of Energy stack-cost model which uses Bloom as a benchmark.

Run the geometry through the density of the ceramic, and each finished 100-kW stack has roughly 2.5 kilograms of scandium oxide baked inside it.

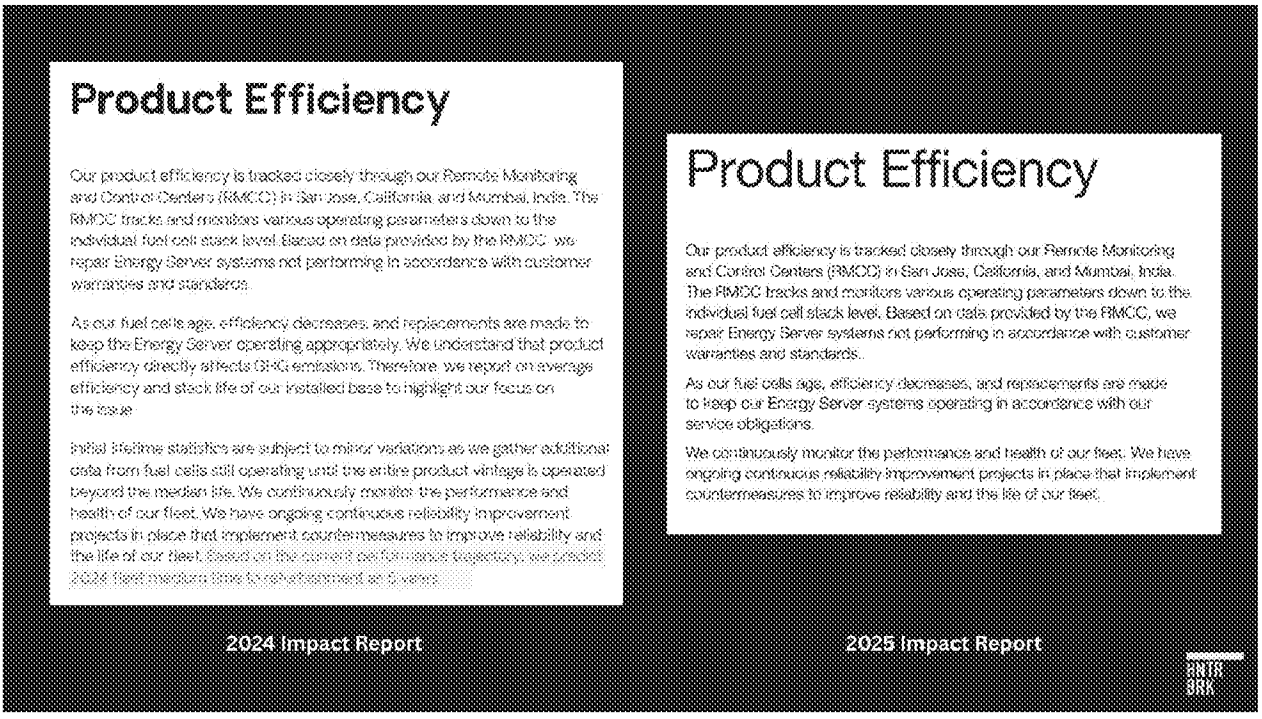
That's roughly 25 tons per GW actually sealed into sellable products.[2]

But a factory has to buy more powder than ends up being used in finished cells.

A Bloom-authored white paper says each step from stack to column to power module has a "yield loss," meaning some parts, which could contain scandium, don't pass to the next build stage. Models tied to the U.S. Department of Energy put numbers around that: A mature-process case gets to roughly 85% yield[3] and a downside case gets to roughly 65%.[4] Hunterbrook modeled an 85% yield in the best case and 65% yield in the downside case, then used the midpoint for the central estimate.

At that rate, the scandium Bloom actually has to purchase climbs to roughly 3.0 to 3.9 kilograms per 100 kW, depending on the scenario.

That assumes Bloom has been honest about its stack life, which has been questioned in the past. And between its 2024 and 2025 Impact Reports, Bloom made its language regarding the life of its fuel cells much more conservative. In 2024, the company said: "We predict 2024 fleet medium time to refurbishment as 5 years." In 2025, the company deleted that language, saying only: "As our fuel cells age, efficiency decreases, and replacements are made."



Bloom statements about product efficiency in its 2024 and 2025 Impact Reports (highlight added by Hunterbrook). Source: Bloom Energy

That's one approach to modeling Bloom's scandium need. Here's a second.

Method 2: Follow the Market

We checked our bottom-up model answer against the market, from the top down.

That starts with the question: How much of the world's scandium supply is consumed by solid-oxide fuel cells (SOFCs)?

Two industry reports put SOFCs at roughly two-thirds or more of total scandium oxide consumption.

Sunrise Energy Metals, in a 2026 feasibility study, estimated global demand for high-purity scandium oxide at 50 to 60 metric tons per year, with about 40 tons going into SOFC production. A 2025 Asian Metal interview with the general manager of Hunan Oriental Scandium reached almost the same fraction from the other direction: roughly 20 tons of SOFC demand out of about 30 tons of global scandium oxide use.

That does not all belong to Bloom, though the company holds by far the largest share in the industry. A February 2026 Soochow Securities report put Bloom's SOFC market share at about 75%. That marks a small increase from Fortune Business Insights' roughly 55% to 65% estimate for 2025 and a separate 2023 estimate of around 60%.

Hunterbrook used the more recent estimates: SOFCs at roughly two-thirds of the 60-ton global scandium demand, and Bloom at 75% of SOFC demand. Multiply them together, and Bloom alone accounts for about 50% of the world's scandium oxide consumption. This may be conservative, as some of Bloom's SOFC competitors, like the Asian giants licensing tech from Ceres Power (Doosan, Delta, Weichai), reportedly don't rely on scandium.

That leaves another 50% — which, besides the other SOFC makers, is spread across aluminum-scandium alloys for aerospace, military, and automotive applications, as well as thin-film manufacturing for semiconductors and other specialty uses.

That means that Bloom plausibly consumed about 30 tons of global scandium oxide in 2025. What did 30 tons enable? According to analysts, Bloom deployed somewhere around 0.7 to 0.8 GW last year, once you count both new installations and the aging modules it swaps out in the field.[5] That implies between about 37 and 43 tons of scandium oxide per GW, a very similar number to the bottom up approach.

Hunterbrook opted for the more conservative number: 37 tons per GW.

Wall Street's models now assume Bloom deploys between 1 GW and 2 GW fuel cells in 2026 — the volume implied by the company's raised revenue guidance of $3.4 to $3.8 billion — and scales toward 5 GW a year by 2030, the "manufacturing footprint" Bloom told investors it can already support on its April earnings call, with additional capex.

Analysts have chased the story upward: UBS raised its target to a street-high $350 after the Brookfield expansion, with RBC at $335, even as BMO warned the headline deals do not yet translate into firm contracted backlog.

That ramp is the valuation: At a recent price of $300 a share, Bloom commands a market value around $70 billion — more than 30 times sales and over 100 times forward earnings — and between 13 times and 20 times the billions of annual EBITDA that even a flawlessly executed 5-gigawatt ramp would generate based on sell-side models.

Assuming 5 GW of production in 2030, the company would need about 185 tons of scandium oxide a year — and once you count Bloom's commitment to replace existing units under warranty (known as field replaceable units, or FRUs), its estimated demand climbs to roughly 220 tons by the end of the decade.

Add the rest of the market — other SOFC makers, aerospace and the aluminum-alloy crowd, et al. — and total global demand runs from about 60 tons in 2025 to about 310 tons in 2030.[6]

That figure introduces some problems. Most importantly, supply.

Supply

Supply does not keep up, even with the model bending certain assumptions in Bloom's favor.

The model starts by assessing how much scandium is produced in the world now. For that, we counted every publicly available output figure from global suppliers we could find and got about 79.2 tons in 2025, roughly equivalent to the 80 ton figure calculated by the U.S. Geological Survey.

Then we added every announced scandium project and expansion we could find, on its own stated schedule, probability-weighting each one by how far along it actually is.[7] [8]

Spurred by growing demand prospects from SOFC and auto industries, Western suppliers have signaled intentions to ramp up scandium production, though in reality most are still years from actually producing it. And even the Western supply that does come online may not be Bloom's to buy — some of it is already optioned to a defense contractor, and at least one potential developer is chasing the auto market. It's a market where more supply may mean more demand, and as more scandium comes online, more industries will want to adopt it.

In Australia, Sunrise Energy Metals' project Syerston — designed for 60 tons a year — is only targeting a final investment decision in 2026, with first output around 2028. Lockheed Martin already holds an option on Sunrise's first 15 tons a year to manufacture fighter jets. Sunrise's stock has risen over 1,000% in the past year, driven by excitement around the opportunity to sell into the fuel cell supply chain.

And in the U.S., NioCorp's Elk Creek project in Nebraska — whose primary focus is producing niobium but also plans to produce about 100 tons of scandium oxide a year — has begun pre-construction on a mine portal.

Formal groundbreaking awaits up to $800 million in debt financing the company has sought from the U.S. Export-Import Bank since early 2023. At an investor conference last month, NioCorp CEO Mark Smith said the company hopes to begin full construction by the end of 2026, with production of some products beginning in late

2029. He did not specify whether scandium would be among the first products produced.

But Washington's interest in the project appears real. The Pentagon has committed up to $10 million in Defense Production Act funding to NioCorp and backs a joint scandium-alloy program with Lockheed's Skunk Works.

Even in the best case, though, Elk Creek would not close the gap, especially as NioCorp's stated focus for scandium is automobiles, namely aluminum-scandium alloys to lighten cars, not fuel cells. Peer-reviewed research has indicated that a major demand boost from the auto industry could put meaningful pressure on an already tight scandium market.

Assuming both Sunrise and NioCorp are likely to come online — with several other, more prospective projects less likely — global supply climbs from about 79 tons to about 240 in 2030.

Roughly 160 of that, about two-thirds, is Chinese. The remaining roughly 80 tons is spread across the rest of the world (after applying risk-adjustments to the production capacity of planned but unfinished Western projects). Under these assumptions, the global market enters a deficit. The gap widens every year, to more than 65 tons short in 2030.

Strip out China, and what's left, the scandium a Western buyer could get its hands on outside the choke point, is not even close to enough. That's why China reliance is necessary, even if not sufficient.

In the model's expected case, uncommitted Western-deliverable supply covers about 12% of global demand in 2026 and falls to below 10% in 2027 and 2028 — the precise window of the Oracle ramp — before recovering to only about 20% by 2030.

The constraint doesn't wait for 2030. It starts binding this year.

Some analysts are underwriting far more than the Street's one-gigawatt base case for 2026 — SemiAnalysis reads Bloom's raised guidance as implying 1.7 to 1.9 GW of shipments.[9] Run a 2 GW year through the model, adding the replacement units Bloom's aging fleet requires, and the company would need roughly 90 tons of scandium oxide in 2026 — more than one and a half times what the entire world consumed, for every purpose, in 2025.

Global supply does grow this year in the model's expected case, to roughly 118 tons — but most of the growth, and roughly 86% of the modeled total production, is Chinese. After the rest of the market takes its share — Lockheed's F-35 chain, aerospace alloys, competing fuel cell makers, about 35 tons in all — approximately 83 tons remain. To produce 2 GW, Bloom needs more than that, according to our model, pulling the global deficit forward from 2027 into 2026.

Others are more conservative. But the outcome isn't all that different. Run the banks' own deployment forecasts through the model — Morgan Stanley's path to 4.7 GW in 2030, Jefferies' to 5 — and, once the replacement units Bloom's aging fleet requires are included (TD Cowen estimates about 300 megawatts of field replacements a year today, scaling toward 500), every published Wall Street deployment trajectory reviewed by Hunterbrook pushes the global scandium market into deficit by 2028, according to our estimates of consumption.

And one final consideration makes the picture even bleaker for Bloom.

Hunterbrook's model includes every ton of scandium oxide supply, whether or not it is fuel-cell grade. But Bloom's electrolyte does not appear to be made from generic scandium feedstock. Its 2012 offtake agreement with Metallica called for "high purity scandium oxide." Sumitomo Metal Mining sells 99.9% pure scandium oxide for fuel cells to a customer that is likely Bloom.

The usable pool for Bloom could therefore be smaller than the headline supply number.

All of which is to say: Bloom's claims of not having a single point of failure are mathematically unsupported. China is integral. And even with China, the math doesn't work out.

"Right now in the Western world, there's basically no scandium processing capability to speak of, or just very, very little," John Mavrogenes, a professor of economic geology at the Australian National University, told Hunterbrook. "It would be a long road to say we're gonna get serious about scandia."

Bloom's July 7 blog post espouses a somewhat different view — noting that scandium is more abundant than lead in the Earth's crust, and that the amount needed for each cell is little more than "a sprinkle of salt." But those observations say nothing about how much scandium Bloom actually needs, or can get, in the aggregate. And while the post acknowledges that the diffuse nature of scandium deposits makes mining it an "economics problem," it implies that Bloom has solved this problem by figuring out that scandium "can be produced" from titanium and nickel waste streams around the world, which is widely known.

Yet again, Bloom says nothing about its *actual* scandium sourcing operations, nor does it acknowledge that the companies recovering and purifying scandium in this way at commercial scale today are overwhelmingly Chinese — including Bloom's own suppliers. The flagship Western example, Rio Tinto's Quebec operation, which recovers scandium from titanium processing exactly as Bloom's post describes, produces about three tons a year — and the U.S. Defense Logistics Agency is already seeking to buy 6.4 tons from Rio over five years for the national defense stockpile.

And China's grip on rare earth exports may grow even tighter later this year.

Every scandium shipment leaving China already requires a case-by-case export license under an April 2025 export-control regime that has never been paused, with only select exceptions. But a second, more sweeping set of controls — suspended as part of the Trump-Xi trade truce — snaps back into place automatically on November 10, 2026, unless the truce is extended.

Under Beijing's "0.1% rule," modeled on Washington's own chip controls, any product made anywhere in the world containing Chinese-origin rare earths would itself need a Chinese export license to be sold onward. These rules would presumably reach Bloom's waypoints in places like Thailand, Japan, and Korea directly.

President Trump left May's Beijing summit without a rare earths deal, and the White House said only that China had agreed to address shortages of several rare earths, scandium among them.

Beijing doesn't need a formal ban to act: April 2025 controls took effect, Chinese exports to the U.S. of yttrium — controlled under the same announcement as scandium — collapsed from 333 tons in the eight months before the block to 17 in the eight months through the end of 2025.

No announcement. Just licenses that never came.

The First Out

That leaves one lever inside Bloom's own control, assuming the company hasn't secretly built a *massive* stockpile over the last two decades:[10] Use less scandium per cell.

Bloom's patents describe how this could potentially happen. Cheaper co-dopants to cut the scandia fraction. Thinner electrolytes to cut the volume. Push both hard enough and it could drag the market back toward balance early next decade.[11]

But there is no public evidence we could find that Bloom has reduced the scandium in its cells as of 2026.

And its own patent record argues it can't easily, because Bloom itself identified under-doped scandia as a cause of accelerated fuel cell aging. Its patented remedy was more dopants, not less.[12] Cutting scandium trades directly against stack life, on which Bloom's 10-to-15-year service contracts and warranty economics depend.

Bloom's own July 7 statement comes to a similar conclusion: The company says it "has developed other materials that can perform a similar role," but that scandium "remains the best choice for our current fuel cell platform."

Unless Bloom accelerates that transition away from scandium, or unless Western mines come online faster than their current schedules suggest, the shortfall leaves Bloom

reliant on the same risky Chinese supply chain it repeatedly promised investors it does not depend on.

The Other Out: Manufactured Demand — The Financing Machine Behind Bloom's Record Quarters

There is one other scenario in which Bloom *wouldn't* have a scandium problem: Maybe the 5 GW of demand never shows up — and maybe it's not even close.

Evaluating this possibility starts with the question: Who is actually buying all the fuel cells that make up Bloom's revenue and backlog today?

Ring Around the Rosie

The answer, on Bloom's own books, isn't hyperscalers — at least not directly. Bloom's new major sources of revenue are financing vehicles Bloom itself part-owns, which buy the equipment and deploy it in projects serving end customers.

In total, nearly half of Bloom's 2025 revenue came from buyers Bloom helped create.

Of the $2.02 billion Bloom reported for the year, $892 million — 44% — came from related parties, according to the company's 10-K. And $862.1 million of that came from the Brookfield "Fund JVs," entities that did not exist until August of 2025. That is, in roughly five months, joint ventures that Bloom co-owns became the source of approximately 43% of its annual revenue.

In the fourth quarter of 2025, $574 million of Bloom's $778 million in revenue came from related parties. In the first quarter of 2026, it was $373 million of $751 million.

The related parties include joint ventures formed in August 2025 with Brookfield, with names like Bolt US JVCo LLC and ORC HoldCo LLC. Bloom holds a 9.9% stake in one and 15% in another; Brookfield and its AI fund hold the rest. Bloom sells to these entities and can recognize product revenue when control of the equipment transfers, even when the counterparty is a financing affiliate rather than the ultimate user of the equipment.

Bloom's own filing acknowledges that its "customers" may not be customers in the way investors assume. A footnote to the concentration-of-risk section states that in certain transactions the counterparty "may be a project-finance affiliate rather than the ultimate end user of the products."

The filings show Bloom booking this revenue not just before deployment, but before it may even send a bill. A new line item appeared on Bloom's balance sheet in 2025 — $62.3 million of "non-current" contract assets, revenue recognized where "billing milestones have not been reached" and invoicing sits more than a year out. The line didn't exist in 2024; 78% of it is related-party.

It raises the question: Where do all the boxes go after the joint ventures buy them?

The answer isn't clear.

In the eight months from when the deal was formed through March, during which Bloom booked more than $1.2 billion in related-party revenue, nearly all from sales to the Brookfield joint ventures, the partnership has not publicly named its end customers. The $5 billion announcement in 2025 specifically promised a European AI factory site "that will be announced before the end of the year." It never was, at least not in a direct enough way for Hunterbrook to find — and the companies' June 30 announcement of a $25 billion expansion nine months later makes no mention of the European site at all.

The closest thing to a named tenant is a company Brookfield created itself. In February, Brookfield launched Radiant, a "vertically integrated AI infrastructure company" formed by merging its in-house venture with a London startup, Ori Industries. Radiant describes itself as the "first compute deployment vehicle and second seed investment" of Brookfield's AI Infrastructure Fund — the same fund whose first seed investment was the Bloom framework — and, per trade press reporting, it will get first dibs on capacity at the fund's new sites.

Radiant has announced no chief executive — its leadership appears to be a Brookfield managing director serving as executive chair and the startup's founder as president — and no publicly named customers.

What it has announced is what it will buy: Radiant is an "NVIDIA Cloud Partner" whose AI factories will be "based on the NVIDIA DSX reference design" and stocked with Nvidia's latest chips. Nvidia, in turn, anchors the Brookfield fund.

The circle closes itself: Nvidia backs the fund; the fund's vehicles buy Bloom's fuel cells; the boxes await AI factories whose designated first tenant is Brookfield's own cloud company; and that company exists to buy Nvidia hardware. At every point in the loop, the demand comes from inside the partnership.

But you might not know *this* was the end customer from listening to Bloom's executives. Bloom hasn't mentioned "Brookfield" since the first earnings call after the partnership was formed.

On the other hand: None of this is exactly concealed. It's disclosed in footnotes. Deloitte flagged the JV accounting as a critical audit matter.

Backlogged Backlog

Bloom, in any case, isn't being valued primarily on any one customer.

It is being valued on the dream of behind-the-meter power. And, for investors, there are two numbers on a balance sheet where dreams generally come true: backlog and remaining performance obligations.

The weird part: In Bloom's case, those two numbers diverge.

Bloom's most recent quarterly filing put its RPO at $441.1 million for products and installation, plus $51.5 million for service, as of March 31, 2026.

Its backlog was an order of magnitude larger: $20 billion total, with $6 billion of the backlog attributable to product revenue specifically.

The mismatch is explained by Bloom's own definitions. Under ASC 606, RPO captures one thing: the transaction price of binding contracts, for obligations not yet fulfilled.

Bloom's 10-K defines its backlog, an unaudited number, far more expansively, as "revenue attributable to existing contractual commitments for the purchase or use of Energy Servers by a financier or an end customer," a figure that "reflects anticipated ITC and other tax incentives as applicable."

Read those clauses one at a time.

"Or use" means the backlog counts arrangements where no one has committed to buy anything, only to take power.

"A financier" means a commitment from a financing vehicle, like the Brookfield joint ventures Bloom part-owns, counts the same as an order from an actual customer.

And "anticipated ITC" means the backlog includes tax credits Bloom hopes to receive from the U.S. Treasury (money from the government), folded into a number marketed as customer demand.

The service side stretches further still: Bloom counts "5 to 20 years" of future maintenance revenue in its $14 billion service backlog while disclosing, in the same paragraph, that those contracts are "subject to termination for convenience on an annual basis."

The audited service RPO, the portion that actually binds, is $25 million.

This is not how others in the industry do it.

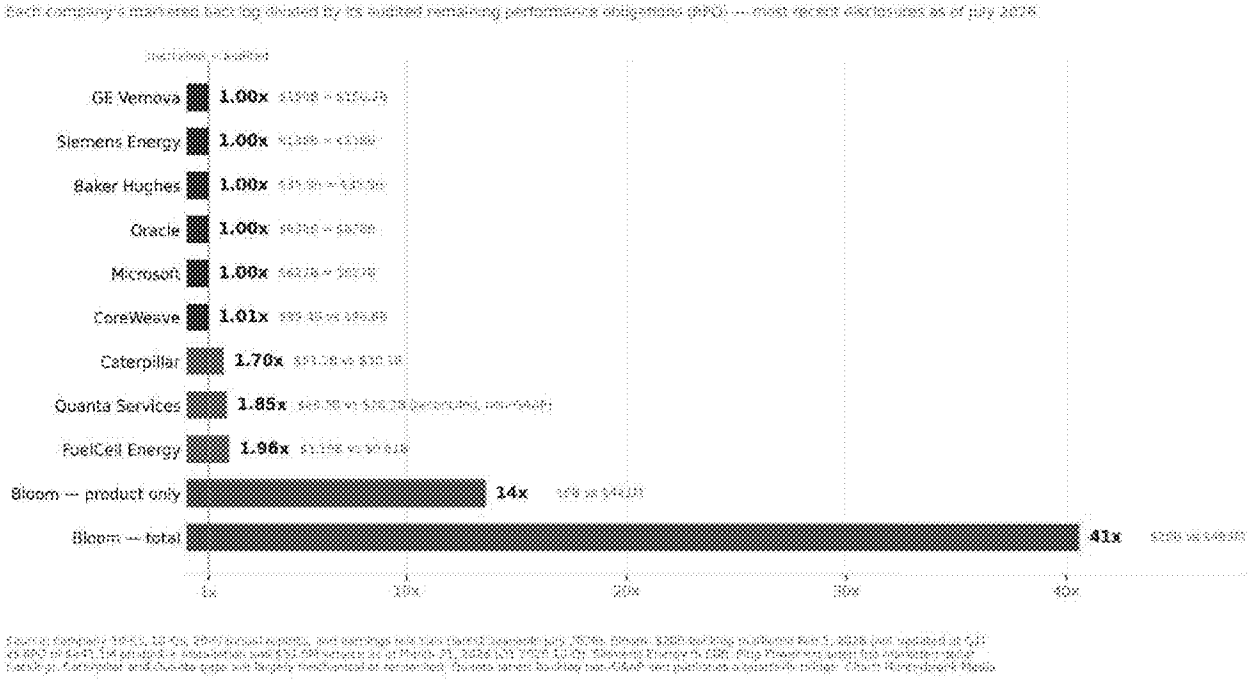
GE Vernova's 2025 earnings release shows a backlog of $150 billion and defines the term as "remaining performance obligation."

Oracle, Microsoft, CoreWeave, and Baker Hughes all market the same number their auditors sign.

Quanta Services, which does fold estimates into its backlog, labels the figure "a non-GAAP financial measure" and reconciles it quarterly.

Across the peers Hunterbrook analyzed, the widest gap between a marketed backlog and audited obligations was about 2x. Bloom's is above 40x. (Even just isolating the analysis to product revenue, and excluding servicing revenue, the gap is 14x.)

Marketed "backlog" vs. audited obligations



Each bar compares a company's marketed "backlog" against its audited remaining performance obligations (RPO) — the ASC 606 / IFRS 15 measure of revenue from contracts that actually bind customers, disclosed in SEC filings and annual reports (latest available, 2025–2026). Sources: Company 10-Ks, 10-Qs, 20-Fs, and earnings releases; Siemens Energy figure from its audited annual report order-backlog note. Chart: Hunterbrook Media

And the quality of that backlog is unclear, as Bloom's keystone projects appear to be delayed.

Deception in the Desert

In April, Bloom issued Oracle a warrant to buy 3.53 million Bloom shares at $113.28 apiece — roughly $400 million of stock, fully vested and immediately exercisable, on terms the companies had agreed to back in October 2025.

Four days later, Oracle announced it was expanding its partnership with Bloom to "up to" 2.8 gigawatts — only 1.2 GW of it actually contracted.

Bloom's stock soared. So, too, did the value of Oracle's warrants. A win-win.

Weeks later, Oracle made another announcement that boosted Bloom's stock price: The hyperscaler said that a single New Mexico data center campus — Project Jupiter,

intended to house infrastructure for OpenAI — would run on up to 2.45 GW of Bloom cells.

Whether Jupiter gets built in the next couple years is itself an open question.

The 17.77-mile gas pipeline required to feed the facility is stuck, as research firm SemiAnalysis reported. And Oracle recently told regulators: "Without a reliable source of natural gas, the power plant that will generate electricity for the data center campus cannot function." That's because Bloom's fuel cells need methane at the campus.

Due to regulatory delays for Oracle's gas pipeline, SemiAnalysis already pushed its base case for first power to 2029. Hunterbrook interviews with four New Mexico officials and a group suing to stymie Oracle indicate it could be delayed into the 2030s, or canceled altogether.

The New Mexico Environment Department (NMED) spokesperson told Hunterbrook it decided on Thursday that Oracle must face opposition at a public hearing. Oracle's goal: getting a key air permit for emissions from Bloom's fuel cells.

NMED decided to hold the hearing after public comments were contaminated. Local news reported Oracle's canvassers collected names and contacts from residents, then submitted supportive comments using their identities, even if the person opposed data centers. Locals found out from an automated NMED email thanking them for input. An Oracle spokesperson denied wrongdoing to local news.

Agency spokesperson Drew Goretzka called it "unprecedented" in an interview with Hunterbrook. He said that NMED "may be pursuing civil or criminal prosecution." Deputy Cabinet Secretary John Rhoderick at the air permit regulator concluded, "They're trying to pad the bet with more positive comments." Without the permit, Oracle cannot install fuel cells, according to the interviews. Bloom's cells are its sole source of power.

Secrecy is how Jupiter arrived in the desert. The project began with mysterious LLCs that hid their real ownership behind misleading names — Green Chile, after the state's pepper, and Acoma, after a Pueblo tribe that made the LLC stop using its name due to no relationship.

Only after the New Mexico Environmental Law Center (NMELC) filed lawsuits did the LLCs reveal they were Oracle, building one of the world's largest data centers for OpenAI.

And Bloom only became part of the project after Oracle withdrew its earlier permit application, which involved even more emissions.

Kacey Hovden, an attorney at NMELC, told Hunterbrook that Oracle's application is "incredibly incomplete" and "wildly underestimated" emissions from Bloom's fuel cells,

a claim supported by the emissions reports from Bloom's troubled Wyoming data center, which contradict the New Mexico data.

“Bloom Energy has a really messy past, and I think that they’ve been trying to push this product for seems like decades, without really anyone biting. And I think the data center industry propped them up at just the right time, because it seemed like they were about to go under,” she said. “It’s not this clean energy solution that they claim it to be.”

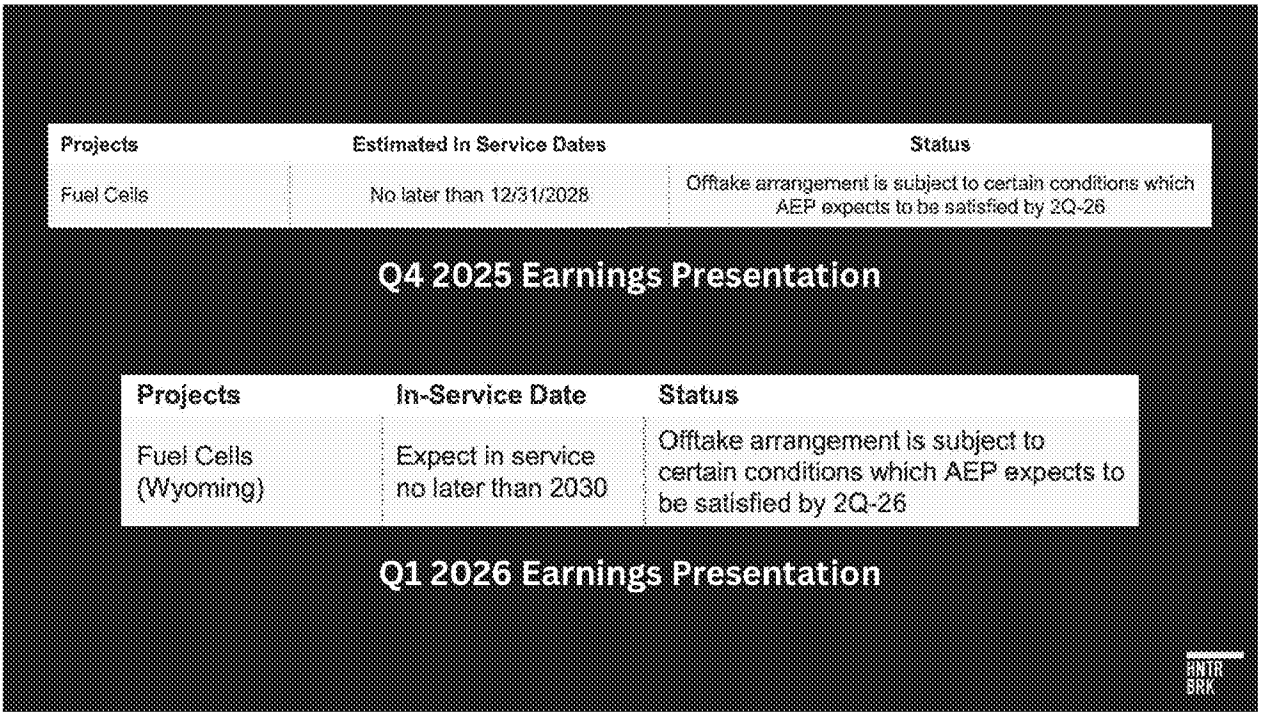
The backlash now runs throughout the local government. The New Mexico Foundation for Open Government sued over Oracle-related emails. A state legislative aide pointed Hunterbrook to a bill that senators will file next session to block new data centers statewide. The county commission chair Manuel Sanchez laughed when Hunterbrook asked how the outcry compares to past issues. “There’s no contest, this has had by far the most public outcry,” he said, citing residents’ alarm over emissions, water, and the disposal of “hazardous waste.” Hovden specified “benzene and formaldehyde,” and said, “Bloom has a history in California actually of dumping that waste into just local landfills, which then of course impacts folks' soil quality, water quality, and everything in between.”

Hovden estimated that first power is now likely “early-to-mid 2030s.” Reuters reported last week that Blackstone’s QTS terminated a Virginia data center after “years of local opposition and litigation.” Hovden’s conclusion about Jupiter: It may not happen at all.

Wyoming

The prospects for Bloom’s other flagship project seem to be worsening too.

The timeline of the apparent anchor of AEP's $2.65 billion fuel-cell investment, a plant near Cheyenne, Wyoming, slipped from "no later than 12/31/2028" in AEP's February investor deck to "no later than 2030" in its May deck, a potential delay of up to two years in under 90 days.



Comparison between AEP's February and May investor decks. Source: AEP

The data center campus that plant would power reportedly lost its developer in June, when Crusoe was pushed out after the prospective anchor customer — allegedly Google, which has reportedly signed nothing — raised concerns about costs and timelines.

AEP's CFO disclosed the mechanics on the May earnings call: If the offtake conditions failed by the end of June, the "hyperscaler" customer would get six months to find the equipment another home "anywhere in the U.S."

If that extension fails, AEP has indicated the utility could force the hyperscaler to pay it back at roughly 110% of "all capital and costs incurred" on the fuel cells.

Whether this would force Bloom to slash its product backlog, nearly 40% of which can be traced to the AEP deal, according to a recent note from analysts at Jefferies, is less clear.

Asked whether AEP would take delivery of fuel cells before its end-customer contracts were final, Sridhar told analysts that Bloom's servers are "not perishable" and can be redeployed. On the next quarter's call, he referred to the fuel cells as "portable and fungible." That is, Sridhar is claiming the boxes can be delivered regardless of whether the specific project moves forward.

"Can," however, doesn't mean "will."