UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO SECTION 13A-16 OR 15D-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of July 2024

Commission File Number: 001-41072

Iris Energy Limited (Translation of registrant's name into English)

Level 12, 44 Market Street Sydney, NSW 2000 Australia +61 2 7906 8301 (Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F \boxtimes Form 40-F \square

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \square

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

EXPLANATORY NOTE

On July 23, 2024, Iris Energy Limited (dba IREN) (the "Company") released via its website, a presentation to be delivered at its Analyst & Investor Day at Nasdaq in New York.

A copy of the Company's presentation is furnished hereto as Exhibit 99.1.

EXHIBIT INDEX

Exhibit
No. Description

Analyst & Investor Presentation, dated July 23, 2024

99.1

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Iris Energy Limited

Date: July 23, 2024

By:

/s/ Daniel Roberts
Daniel Roberts
Co-Chief Executive Officer and Director

Analyst & Investor Presentation

July 23, 2024 New York, NY



DISCLAIMER

Forward-Looking Statements

This investor update includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements generally relate to future events or IREN's future financial or operating performance. For example, forward-looking statements include but are not limited to the Company's business strategy, expected operational and financial results, and expected increase in power capacity and hashartae, in some cases, you can identify forward-looking statements by terminologue but a "anticipate," "believe, "may," can, "should!" "could," "might," "plan," "possible," "project," "strive," budget, "forecast," "expect, "intend," "target, "will," "estimate," "predict," "poretnial," "contine," "shoulded or the negatives of these terms or variations of the or similar terminolity, but the absence of these words does not mean that statement is not forward-looking. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements.

These forward-boking statements are based on management's current expectations and beliefs. These statements are naither promises nor quarantees, but involve known and unknown risks, uncertainties and other important factors that may cause IREN's schall results, performance quarantees, but involve known and unknown risks, uncertainties and other important factors that may cause IREN's schall results, performance statements, including, but not limited to: Bitcoin price and foreign currency exchange rate fluctuations; our ability to obtain additional capital on commercially reasonable terms and in a timely manner to meet our capital needs and facilitate our expansion plans; the term of any future financing or any refinancing, certar returbuting or modification to the terms of any future financing, which could require us to comply with onerous covenants or restrictions, and our ability to service our debt obligations, any of which could reterict our business operations and adversely impact our financial condition, cash flows and restatisf of operations; our ability to exceed the state of the programment of the programme

ongoing proceedings relating to the default by two of the Company's wholly-owned special purpose whickes under limited recourse investigations, and the costs, expenses, use of resources, diversion of management time and afforts, failure of the company is the costs, expenses, use of resources, diversion of management time and afforts, failure of the company with any less including the anti-company includes the costs of the United States and various international jurisdictions: failure of our compliance and failure in compliance with management methods any laws, regulations and efficient standards that may relate the anti-company of the United States and various international jurisdictions; failure of our compliance and failure of our compliance with the management methods and the states of the United States and various international productions and the Bittom management methods and the states of the United States and various international production and the Bittom and the Bittom in the states of the Children of the States and Various deviced, including regulations related to data privacy, operations of the strong of the states of the Children of the States and Various deviced, including regulations related to data privacy, operations of the Children of the States and Various deviced, including and the states, and the states of the Children of the States and Various deviced, including and the states of the Children of the States and Various deviced, and the Various deviced of the Children of the States and Various deviced in the States and Variou

These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements mac in this investor update. Any forward-looking statement that IREN makes in this investor update speaks only as of the date of such statement. Except as required by law, IREN disclaims any obligation to update or revise, or to publicly announce any update or revision to, any of the

Industry and Statistical Data

This presentation includes industry data, statistical data, estimates and other forecasts that may have been obtained from periodic inclus publications. Hird-party studies and surveys, filings of public companies in our industry, internal company surveys, and our review and enally of market conditions, surveys and industry feedback. Our expectations reparding market and industry conditions cand, as a result, encluding expected growth rate subject to change based on our ongoing manyles of proveiling market and industry conditions and, as a result, sumptions based on su expectations may not be reliable indicators of future results. We undertake no obligation to update such figures in the future. These source include government and industry sources, including hitd-party sublications and surveys generates that the informatic contained therein has been obtained from sources believed to be reliable. Although we believe the industry data to be reliable as of the date the presentation, this information could prove to be insecurate, industry data could be wrong because of themfold by which source obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliable of raw data, the voluntary nature of the data galhering process, and other limitations and uncertainties. In addition, we do not know all of assumptions regarding general economic conditions or growth that were used in preparing the forecasts from the sources reliable upon or different process.

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AGENDA

Topic	Time	Presenter
Welcome	11:00am — 11:10am	Daniel Roberts, Co-Founder & Co-CEO
Operations	11:10am — 11:30pm	David Shaw, Chief Operating Officer
Next-Generation Data Centers	11:30am — 11:45pm	Denis Skrinnikoff, Chief Technology Officer
Commercial Strategy	11:45am — 12:00pm	Kent Draper, Chief Commercial Officer
Q&A and Closing Remarks	12:00pm — 12:30pm	Team
Lunch	12:30pm — 1.30pm	All



Digital growth is exponential.

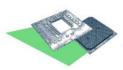


Physical work can't keep pac

The power and infrastructure crunch has only *just begun*.



"You *can't operate ASICs* in the heat"



"You can't operate GPUs with air-cooling"



"You can't build GW scale sites"

- · Cold climates used to be the focus for Bitcoin mining
- Even manufacturers didn't believe ASICs could operate at 110
- AI world didn't believe we could operate GPUs with air-coolir
- We are not dogmatic and are progressing liquid cooling optic
- If GPU costs decline over time, we expect:
 - o increased focus on data center capex
 - o increased demand for compute (i.e. Jevons paradox)
 - o innovative, cost effective and large-scale operations to e

PRESENTERS



Daniel Roberts
Co-Founder and Co-CEO

Previously 2nd largest individual shareholder in \$6bn infrastructure fund

Finance Infrastructure Renewables



David Shaw Chief Operating Officer

Previously SVP Operations Asia-Pacific East at global engineering firm Wood

Energy Utilities Resources



Denis Skrinnikoff Chief Technology Officer

Previously Head of Cloud & Data Centers at TeraGo and RackForce

Data Centers Cloud Architecture Enterprise Solutions



Kent Draper Chief Commercial Office

Previous experience with First Solar, RBC and Macquarie

Finance Infrastructure Renewables



Operations

David Shaw
Chief Operating Officer



PORTFOLIO



510 MW

data centers in 2024

2,160 MW

secured power capacity

1GW+

development pipeline





Vertically integrated



Land



Grid-Connected Power



Data Centers



Compute

Supporting power-dense workloads



Prince George Data Center ASICs & GPUs

TRACK RECORD OF GROWTH & DELIVERY

IRE

Disciplined approach to procurement and construction driving rapid expansion



IRE

250MW *immediately available power* for 2025 expansion





Next-Generation Data Centers

Denis Skrinnikoff Chief Technology Officer





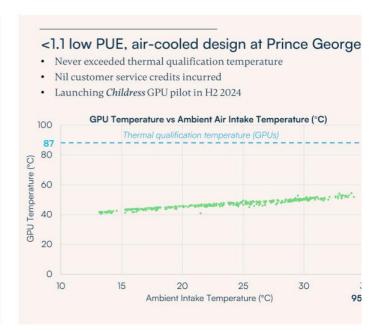
DATA CENTERS - "THE NEW COMPUTE"



Challenges faced by *traditional* data centers

Managing Power Rack Density **TokW** **PokW** **PokW

IREN next-generation data center performar



Proprietary technology solutions *integrated* into data center design & operations

Data Analytics Millions of real-time data points captured every day, driving continuous advancements in data center design and operations **Topic of the continuous of the

Automated Power Cost Optimization Seamless transition between energy consumption and energy trading in Texas to optimize Bitcoin mining profitability Power Price v Power Consumption Power Price v

IRE

FAQs





Cooling

Network

"Are battery and generator back-ups necessary for AI workloads?"

- IREN is grid connected; BC Hydro (99.931%) and AEP (99.957%) operated grids are reliable
- IREN already has battery and generator back-ups for key componen at all sites (network, storage, security and key management systems)
- Customers optimize redundancy in both the data center and their broader operations:
 - Training workloads: regular checkpointing
 - · Inference workloads: multiple data centers
- Based on customer preferences, IREN can enhance power redundar and resilience for the compute at all sites; through generators, batter and additional power paths

Note: Refer to assumptions and notes on page 32



Power



"Is liquid cooling with access to large water resources required for AI workloads?"

- Sustainability considerations driving data center industry away from liquid cooling systems with high water consumption
- Evaporative liquid cooling systems rely on a continuous water suppl while closed-loop systems recirculate a coolant and do not require large water reservoir on site
- ✓ IREN can retrofit existing sites with liquid cooling systems
- The future may not be all liquid cooling: latest generation GPU architectures continue to support air-cooling e.g. NVIDIA H100 (current) / B200 (next-gen) and AMD MI300X

I R E

FAQs



Power

Cooling

Networl

"Are data centers in remote locations suitable for AI workloads?"

- 1,000 milliseconds in a second; few compute workloads require sub 0.02 seconds latency (<20ms)
- Latencies at IREN sites can support vast majority of workloads
 Prince George <20ms (currently supporting AI workloads)

Mackenzie <20ms Canal Flats <20ms

Childress <10ms West Texas Site <10ms

- ✓ IREN has best practice network redundancy at all sites;
 - · Two physically diverse fiber paths with multiple carriers

Note: Refer to assumptions and notes on page 32



Commercial Strategy

Kent Draper Chief Commercial Officer



DEVELOPMENT PROCESS

Can take 4-7 years to energize a greenfield development



IRE

Select Market

Identify Sites
Secure Land
Development
Connection
Procurement



Our *priorities* when selecting sites

- ✓ Low-cost, abundant renewable energy
- ✓ Bankable jurisdictions
- √ Large-scale power access
- ✓ Reliable grids



DEVELOPMENT PROCESS

Salact Market

IdentifySites

Secure Land
Development
Connection
Procurement
Construction



We conduct *initial feasibility* and *development studies* to identify suitable ar

- ✓ Potential grid capacity
- Proximity to transmission lines / substations
- √ Fiber access, low latency
- ✓ Large land parcels, away from residential areas
- Ease of construction
- Acceptable permitting and zoning conditions



IRE

Select Market Identify Sites

Secure Land

Development Connection Procurement Construction



We *option* or *purchase* land

After further site diligence, we engage land brokers to secure large contiguous land parcels close to the transmission network



DEVELOPMENT PROCESS

IRE

Select Market Identify Sites

Development

Connection
Procurement
Construction



Infrastructure-experienced team closely manages extensive development activitie

- Stakeholder relations
- Development studies
- Initial site civil studies
- Title analysis
- · Acoustic assessment
- Rezoning (if required)
- Tax abatements
- Permitting
- Design work & site planning



Select Market Identify Sites Secure Land Development

Connection

Procurement Construction



Securing a utility interconnection – the *current bottleneck*

- Commission formal connection studies to determine total power available
- In parallel with development approvals, obtain grid regulator approval (e.g.
- · Sign connection agreement with utility to:
 - ✓ Secure power availability at site from in-service date
 - ✓ Confirm cost of interconnection (e.g. for new switchyard)
 - ✓ Ensure IREN's power capacity secured under agreement

IREN power capacity now secured and included in grid assessment for any subsequent queued sites

DEVELOPMENT PROCESS

Select Market Identify Sites Secure Land Development Connection

Procurement

Construction



Procurement of long lead items commen ~3 years prior to grid connection

- High/medium/low voltage electricals
- Power redundancy
- Network infrastructure
- Cooling systems
- Computing hardware
- ✓ Close and active vendor relationships enable early detection of bottlenecks
- Reserves of certain key components maintained for future developments



Select Market Identify Sites Secure Land Development Connection Progurement

Construction



300+ on site personnel at Childress delivering on IREN's growth plans

- Substations
- Data Centers
- Supporting Infrastructure





energy and infrastr projects delivered b IREN's leadership to



DATA CENTER ARCHITECTURES



IREN can accommodate a *range* of customer preferences

O1 Utilize Existing IREN Data Centers

IREN Prince George -Current GPU Deployment



Build to Suit New IREN Data Centers

Accommodating Customer Preferences



03
Retrofit Eviet

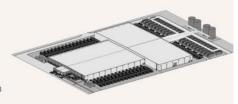
Retrofit Existing IREN Data Centers

IREN Prince George - Retrofit Conceptual Design

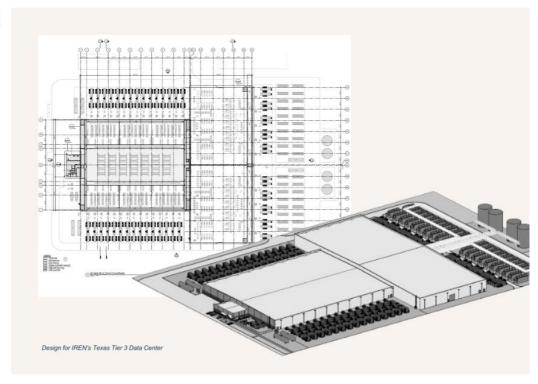


D4

Build IREN
Tier 3 Data
Centers
IREN Texas - Tier 3
Rendering



Front-end engineering design for an IREN *Tier 3 Data Center*



ILLUSTRATIVE MONETIZATION OPTIONS







B	tcoin Mining	
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AI Colocation

Business	Bitcoin network security (Bitcoin rewards sold daily)	GPU compute for AI customers	Hosting 3rd party GPUs	
Infrastructure	Existing data centers	Existing / new data centers	Existing / new data centers	
Hardware	ASICs	GPUs	Customer GPUs	
Contract term	-	On-demand (<1 month) Reserved (<36months)	5 - 15 years	
Annual revenue per MW	~\$1.2m	\$14 - \$18m	Customer & capex dependen	
Hardware profit margin	~70%	~98%	N/A	
Infrastructure capex per MW	rastructure capex per MW \$0.75m		\$0.75m to >\$10m	
Hardware capex per MW	\$1.2m	\$32m	Nil	
Financing Equity		Equity Equipment & corporate debt Customer prepayments	Equity Project & corporate debt Customer financing	

Monetization of power and land portfolio

- All options under consideration e.g. asset sales, colocation deals, JVs, build-to-suit data centers and GPU fleet expansic
- Morgan Stanley engaged to evaluate opportunities in the AI data center market, initially focused on 1.4GW site

Note: Refer to assumptions and notes on page 32

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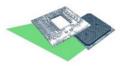
>3,000MW power and land portfolio



Demonstrated track record and commitment to value creation



Bitcoin mining provides foundation for continued growth



Monetizing into new and high value use cases including AI

Solving the powe and infrastructur crunch, by getting ahead of real-work constraints.



ASSUMPTIONS AND NOTES

- er average rack densities are below 6kW per rack; most operators do not have any racks beyond 20kW. Source: Uptime Institute. Source: Annual Global Data Center Survey 2023.

- Data center average rack densiting are below own per rack; most operators do not nave any racks beyond zukw. Source: Opinine institute, source: Annual Global Data Center Survey 2023.

 NVIDIA H100 rack density reflects power draw for NVIDIA SuperPOD reference architecture (comprises 8 GPUs per server and 4 servers per rack).

 IREN rack density reflects existing Bitcoin mining workloads within a 52 rack unit footprint.

 Scatterplot of GPU temperatures vs. ambient air intake temperatures, plotted on 10 minute time intervals. Data collected between June 11 and July 21, 2024. Analysis conducted on data points where GPU fleet utilization is >80% and days where ambient air temperatures were >30 degrees Celsius (86 degrees Fahrenheit). Excludes potential anomaly data from July 8-10, 2024 under review.

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 BC Hydro reliability metric reflects annual average percentage of time in service available for BC Hydro overall for the fiscal years ended March 31, 2022, March 31, 2023 and March 31, 2024. Source: BC Hydro Annual Reporting of Reliability Indices Annual Response to Directive 26 of BCUC Decision on F2005/F2006 Revenue Requirements Application, May 14, 2024.

 AEP reliability metric reflects AEP's US Average System Availability Index (ASAI) for the years ended December 31, 2021, December 31, 2022 to December 31, 2023. Source: AEP 2024 Corporate Sustainability Report.

- Page 18
 Reflects round trip latency from IREN data center to nearest hyperscaler region.
 Installation of second fiber path at Mackenzie expected to be completed in late 2024.

- Revenue per MW of Bitcoin Mining reflects annualized revenues for 1MW of data center capacity with hardware operating at 100% uptime. Assumptions: \$65,000 (Bitcoin price), 587 EH/s (global hashrate), 16 J/TH
- (hardware efficiency), 3.125 BTC (block reward), 0.3 BTC (transaction fees), 0.15% (pool fees).

 Revenue per MW of Al Cloud reflects observed pricing benchmarks of \$2-\$2.50 per GPU hour and 100% hardware utilization.

 Hardware profit margin of Bitcoin Mining and Al Cloud reflects revenue less assumed electricity costs / revenue. Bitcoin Mining assumes \$0.04/kWh electricity costs and Al Cloud assumes \$0.05/kWh electricity costs.
- Hardware profit margin of Bircoin Mining and Al Cloud reflects revenue less assumed electricity costs. Fevenue. Bircoin Mining assumes \$0.04/kWn electricity costs and Al Cloud assumes \$0.05/kWn electricity costs. Excludes all other site, overhead and REC costs.

 Infrastructure capex per MW of Bitcoin Mining and Al Cloud reflects capex for current data center design (\$750k per MW).

 Infrastructure capex per MW of Al Colocation is dependent on a variety of factors, including customer preferences around redundancy and cooling solutions. Low end of range reflects capex for current data center design (\$750k per MW) while upper end of range (\$\$10m) reflects publicly observed benchmarks.

 Hardware capex per MW of Bitcoin Mining assumes \$18.9/TH pricing, Hardware capex per MW of Al Cloud assumes \$40k per H100 GPU pricing.

