arcus POWER | DATAHUB

SOLUTION BRIEF

UNIFYING NEAR REAL-TIME, HIGH FREQUENCY POWER MARKET DATA AT SCALE

Arcus Power DataHub delivers 25+ years of trusted, reliable power market data right into your cloud for instant analysis. Choose flexible modules and delivery speeds to fit your needs. Get scalable, secure data pipelines that help you turn data into real value — fast and without compromise.

SOLVING MARKET DATA AT SCALE

Modern power markets produce staggering volumes of granular data across prices, grid conditions, forecasts, emissions, and external signals like weather and exchanges. Firms operating in trading, forecasting, optimization, and risk management require access to large quantities of high-frequency historical and near-real-time data for quantitative models, analytics products, and supporting operations.

CLOUD-NATIVE, HIGH FREQUENCY DATA DELIVERY PLATFORM

- Push-based architecture for large data volumes
- Direct delivery into the customer's cloud storage (Azure, AWS, GCP)
- Ready-to-query and light formats (e.g., Parquet, JSON) removing pipeline maintenance
- Automated synchronization, backfills, and schema evolution

REMOVING BARRIERS TO DATA INTEGRATION

Datahub provides multiple delivery methods that can be selected as per the customers preference. We take the burden of integrations of thousands of data sources and integration methods.

> **Energy data shouldn't be a bottleneck. With our DataHub, we remove the burden of fragmented sources, manual pipelines, and latency. Our datahub delivers 100s of billions of rows, structured, contextualized, high-quality, and analysis-ready into your cloud environment in minutes. It's built to empower quantitative teams, trading operations, and project developers to move faster, scale smarter, and focus on what matters: insight and action**
>
> **—ALVARO ROZO**
>
> Chief Product Officer, Arcus Power

MASSIVE SCALE, MINIMAL LATENCY

Handles deliveries exceeding 100's of billions of records, updating datasets as data gets published from the source. Support a variety of applications including near realtime trading, forecasting or simulation.

MULTI-SOURCE INTEGRATION

Merges public market data, private partner feeds (e.g., weather, exchange data), RTM, DAM & Forecasts- CP, Demand, and customer-specific datasets into a unified data model.

CHANGE DATA CAPTURE AND VERSIONING

Handles evolving data structures by preserving backward-compatible schemas, ensuring downstream systems keep running without breaking on ISO updates, format changes, data adjustments and corrections.

OPEN ACCESS

Data is available utilizing the customers preferred methods of delivery in open formats - CSV, JSON, Parquet, Snowflake and many other recognized formats. Visualize the data using popular tools like Power BI, Grafana, etc.

DATAHUB ACQUISITION & DELIVERY MODELS

1 PUSH-TO-CLOUD MODEL

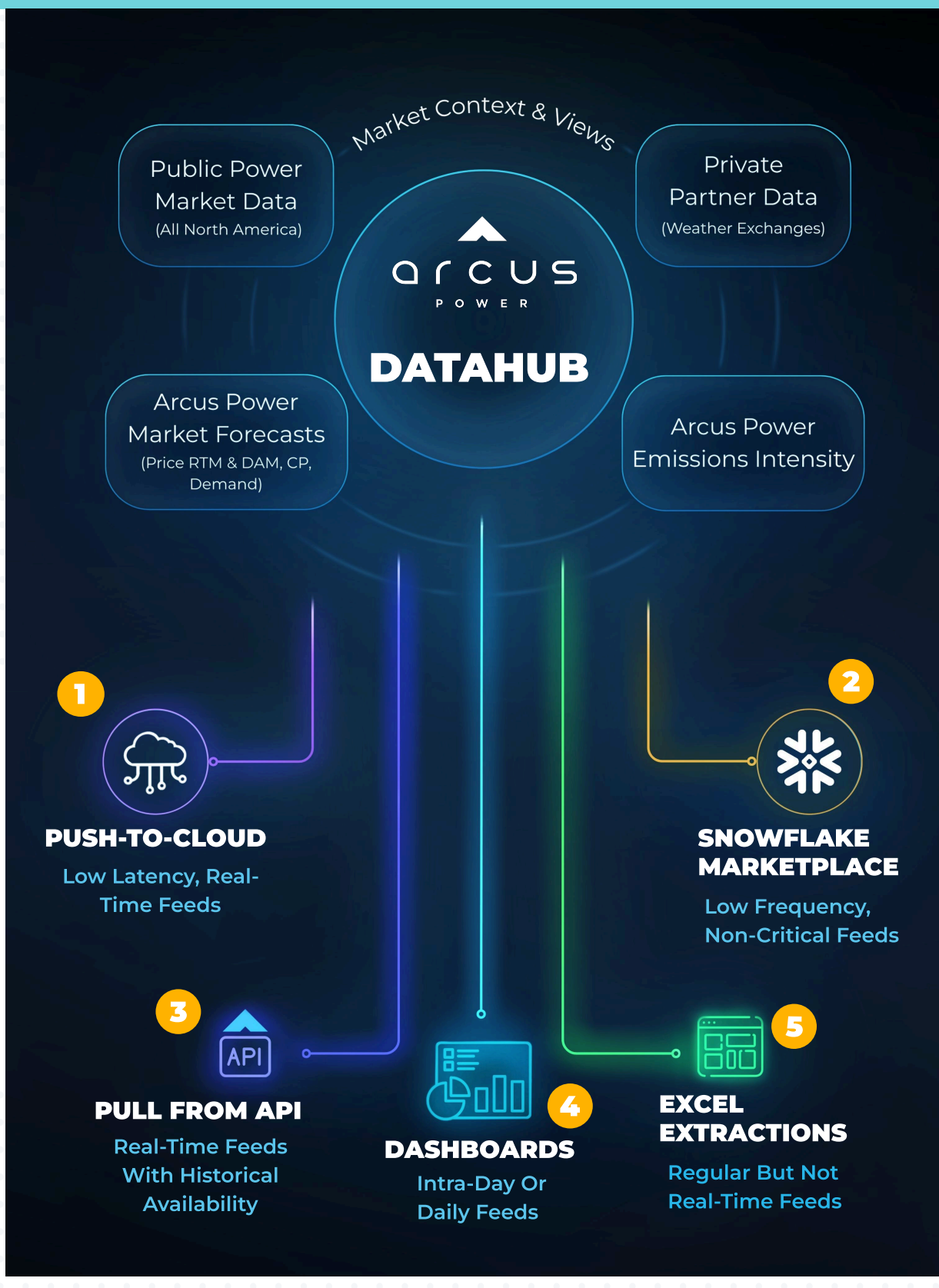
- Used by teams running cloud data lakes and large-scale analytics.
- Delivers high-volume data directly into customers Datalakes.
- No vendor lock-in—customers keep full control over data and security.

2 PULL FROM snowflake MARKETPLACE

- For customers already invested in Snowflake's ecosystem.
- DataHub publishes curated, pre-modeled data sets and views to Snowflake Marketplace for consumption via Snowflake queries.
- Suitable for enterprise reporting, dashboards, and integration into other Snowflake-native tools like Streamlit applications.

3 PULL FROM ARCUS API

- Access to workflows requiring transactional queries, time-series or selective data retrieval.
- Designed for near real-time systems or applications that don't require large data transfers but demand specific, timely data blocks.



4 PROPRIETARY DASHBOARDS

- Access via our configurable dashboards for analysis, trading and market monitoring applications.
- Delivers clean, aggregated data through a ready-to-use front-end—no setup or pipeline work required.

5 EXCEL EXTRACTIONS

- Rapid, lightweight access for users without a dedicated data pipeline.
- Supports ad hoc analysis, spot checks of market conditions. Direct download capability for smaller data sets

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SOLUTION BRIEF

USE CASES

1 PUSH-TO-CLOUD MODEL

Use Case: House the data in your environment to create and develop your own analytical applications.

2 PULL FROM snowflake MARKETPLACE

Use Case: Teams can pull our data directly from Snowflake marketplace to run forecasts, track market changes, or build reports—without waiting on ETL. Useful for analysts and operators who are on Snowflake ecosystem & who want to combine our data to build interactive apps using Streamlit.

3 PULL FROM ARCUS API

Use Case: Operational and analytical data where historical context exists. ***Examples:*** *ISO market performance data, SCADA values with backfilling capabilities*

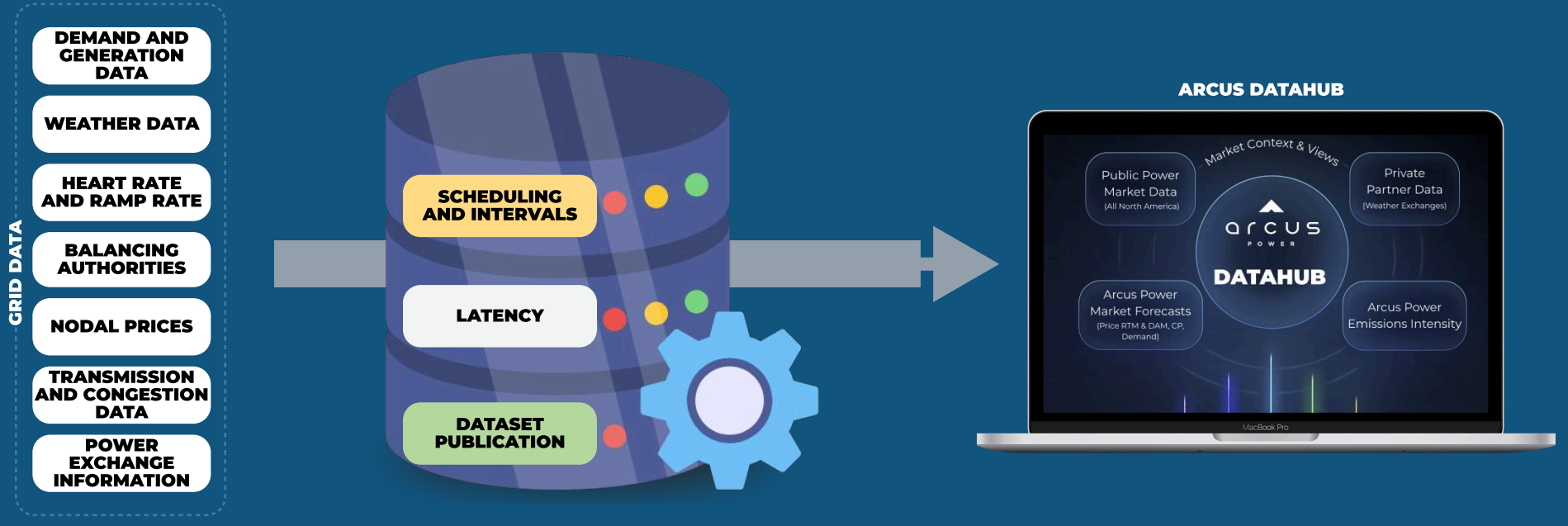
4 PROPRIETARY DASHBOARDS

Use Case: Structured reports or calculations not reliant on real-time refresh.

5 EXCEL EXTRACTIONS

Use Case: Reference data, forecast curves, emission models, or planning reports

DATA ACQUISITION AND PRIORITIZATION METHODS



FEED PRIORITIZATION METHODS

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Ultra Low Latency, Near Real Time Feeds* No History	Near Real Time Feeds With Historical Availability	Scheduled Intra-Day Or Daily Feeds	Regular But Not Real-Time Feeds	Low Frequency, Non Critical Feeds
Typical Data Interval: 1 to 5 minutes	**Typical Data Interval:** 5 mins to Hourly	**Typical Data Interval:** Hourly or daily	**Typical Data Interval:** Hourly, Daily, Weekly, Monthly	**Typical Data Interval:** Hourly to Monthly
Scheduling Frequency: Every 5 secs, up to 2-3 mins	**Scheduling Frequency*:** Sub 1 minute, Configurable for time-window delivery	**Scheduling Frequency:** Every 30-60 mins, or 6-12 hrs	**Scheduling Frequency:** Every 6, 12 or 24 hours	**Scheduling Frequency:** 6, 12 or 24-hour intervals
Delivery Latency: Near Real-time, up to 6 mins	**Delivery Latency:** Sub min, up to 2 hrs, configurable scheduling	**Delivery Latency:** 30 mins up to 12+ hrs	**Delivery Latency:** 60 mins up to 24 hours	**Delivery Latency:** 60 mins up to 24 hours

COMPETITIVE BENCHMARKING

FEATURE	ARCUS DATA HUB	LEGACY API PLATFORM	STATIC DATA FEED PROVIDER
DELIVERY ACCESS MODELS	Push To-Cloud + API+ Dashboards + Snowflake	API Access Only	File Delivery Only
LATENCY/ REFRESH	Real Time, Configurable Based On Specific Use Cases	Sub Minute, Hourly, Daily	Daily Or Weekly
FORMAT	Compressed, Columnar (Parquet), And Desired Formats	JSON, CSV, XML	CSV, XLS
DATA VOLUME SUPPORT	Multi-TB Drops, 100s Of Billions Of Rows Of Data	Query Limits, Pagination Constraints	File Size Capped, Splits Needed
CLOUD COMPATIBILITY	Full Support For Azure, Aws, S3, GCP, No Intermediary	Often On-Prem Or Intermediate Pipelines Needed	Requires Manual Staging
SCHEMA EVOLUTION	Fully Managed With Backward Compatibility	Limited Or Customer Managed	Static, Format Changes Are Disruptive
MULTI SOURCE INTEGRATION	Public ISO, Arcus Proprietary, Partner Data Unified	ISO Only; Limited Integration	Typically Single ISO Per Feed
ETL/PIPELINE BURDEN	Zero Pipeline Maintenance, Arcus Managed	Customer Handles Ingestion, Deduplication, Reprocessing	Full ETL Responsibility On Customer
USE CASE FIT	Trading, Simulations, ML Training, Embedded Data Products, Dashboards	Ad Hoc Queries, Basic Dashboards	Compliance Reporting, Archival Use
VENDOR LOCK IN	None- Open Formats, Customer Owned Environment	High- Tied To Vendor API And Infrastructure	Medium- Limited Formats

ABOUT ARCUS POWER

Arcus Power is an energy market intelligence company trusted by Global Utilities, Fortune 500 companies, cities, small manufacturers, and power generators alike. Arcus supports microgrids and commercial & industrial customers to reduce their operating costs and lower their carbon footprint. Our SaaS solutions include; a customizable platform for streaming historic and real-time energy market data and analytics on one of North America's largest power market databases, predictive tools for cost management that dynamically optimize demand response, energy price & coincident peaks with operations and cost decision support tools for environmental and sustainability mandates, utilizing dynamic tracking & forecasting of the grid and onsite emissions. Uniquely differentiating Arcus is our proprietary technology that allows us to tailor our systems to the unique operational needs and economic demands of our clientele. For more information, visit **arcuspower.com** and for a Free Trial of the platform, register here.