



# DCFlex: Flexibility that Powers Possibility

## NASUCA 2025 | Seattle, WA

**Morgan Scott**

Vice President, Global Partnerships & Outreach  
EPRI

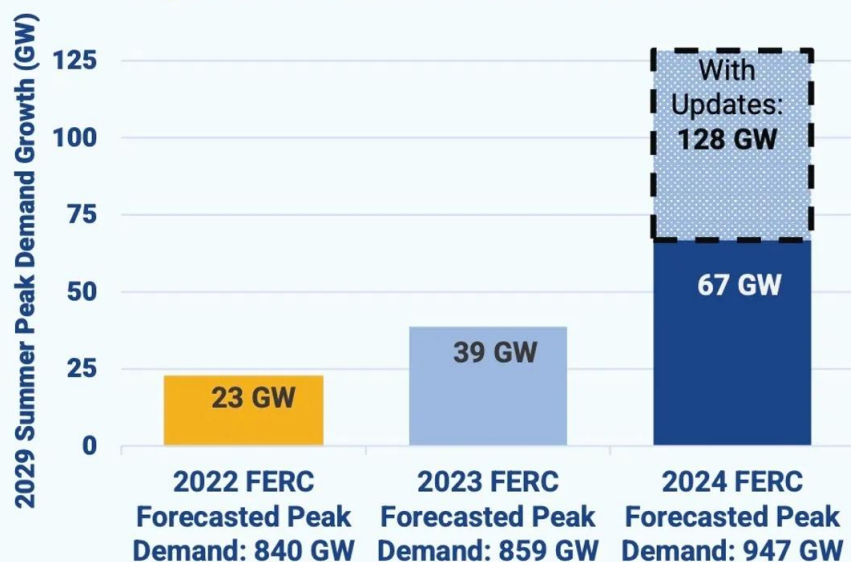
KNOWLEDGE IS POWER AND NOW WE HAVE THE  
OPPORTUNITY FOR POWER TO CREATE KNOWLEDGE

# U.S. Grid Growth Continues to JUMP

*...and it's still climbing*

## The BIG (Demand) Picture

### 5-year Nationwide Growth Forecast

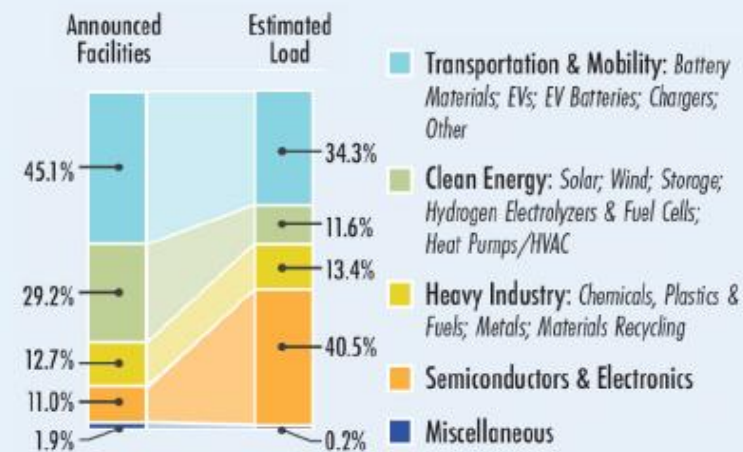


Source: [Canary Media](#)

### Industrial:

From Jan 2021 – May 2024, **534** new or expanded manufacturing facilities accelerating from COVID, CHIPS and IRA legislation.

### Reindustrialization by Major Industry<sup>1</sup>



### Electrification:

In 2024 - EV sales increased **15%**; electric heat pump sales surpassed gas furnace sales **32%**<sup>3</sup>



### Computation:

Data center load could rise from **4.4%** of U.S. electricity demand to **12%** by 2028.<sup>2</sup>



Sources: 1. [EPRI](#), 2. [Berkeley Lab](#), 3. [IEA](#)

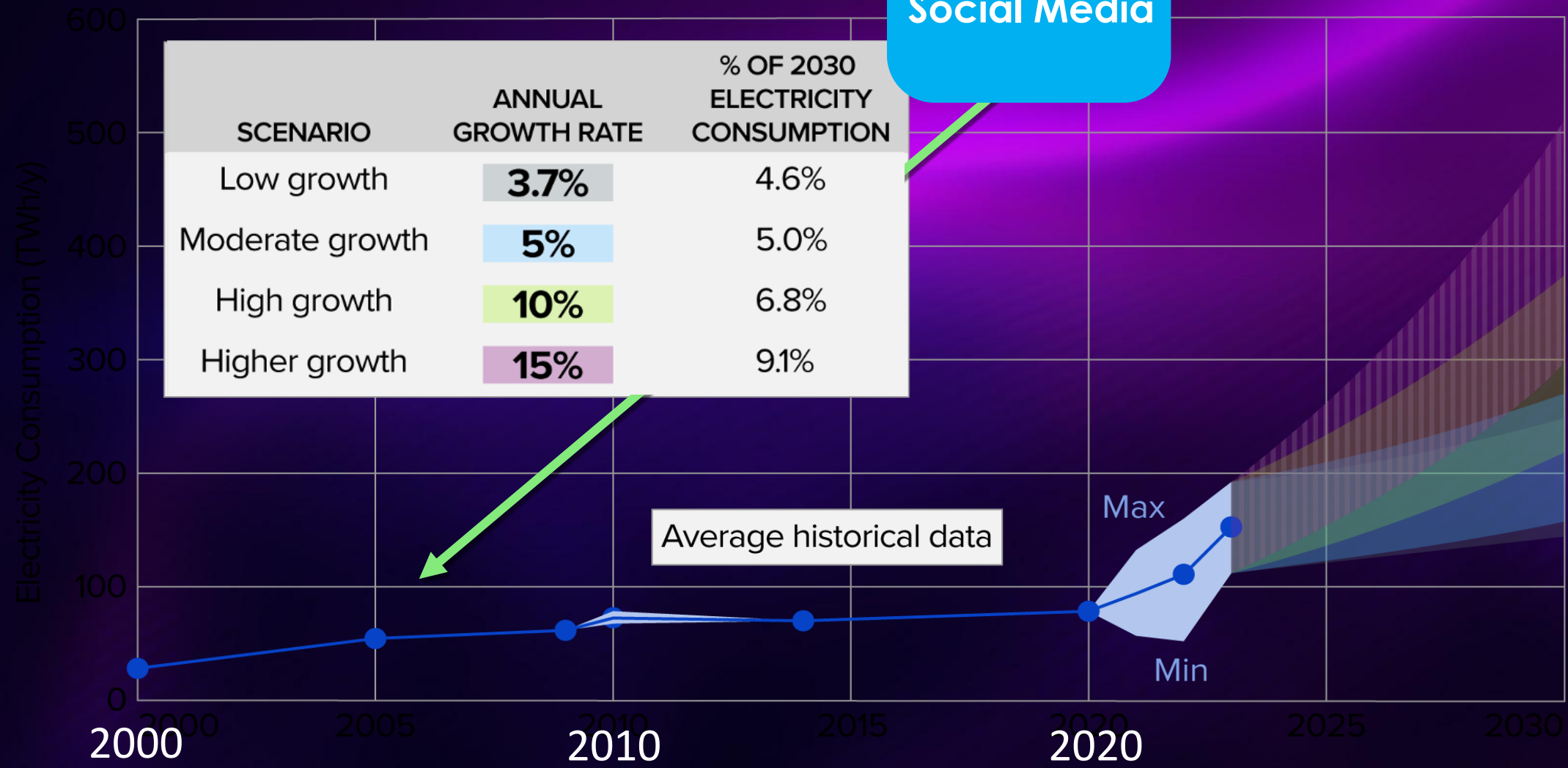
# AI is Driving a Third Wave of Data Center Growth

Wave 1

Early 2000s

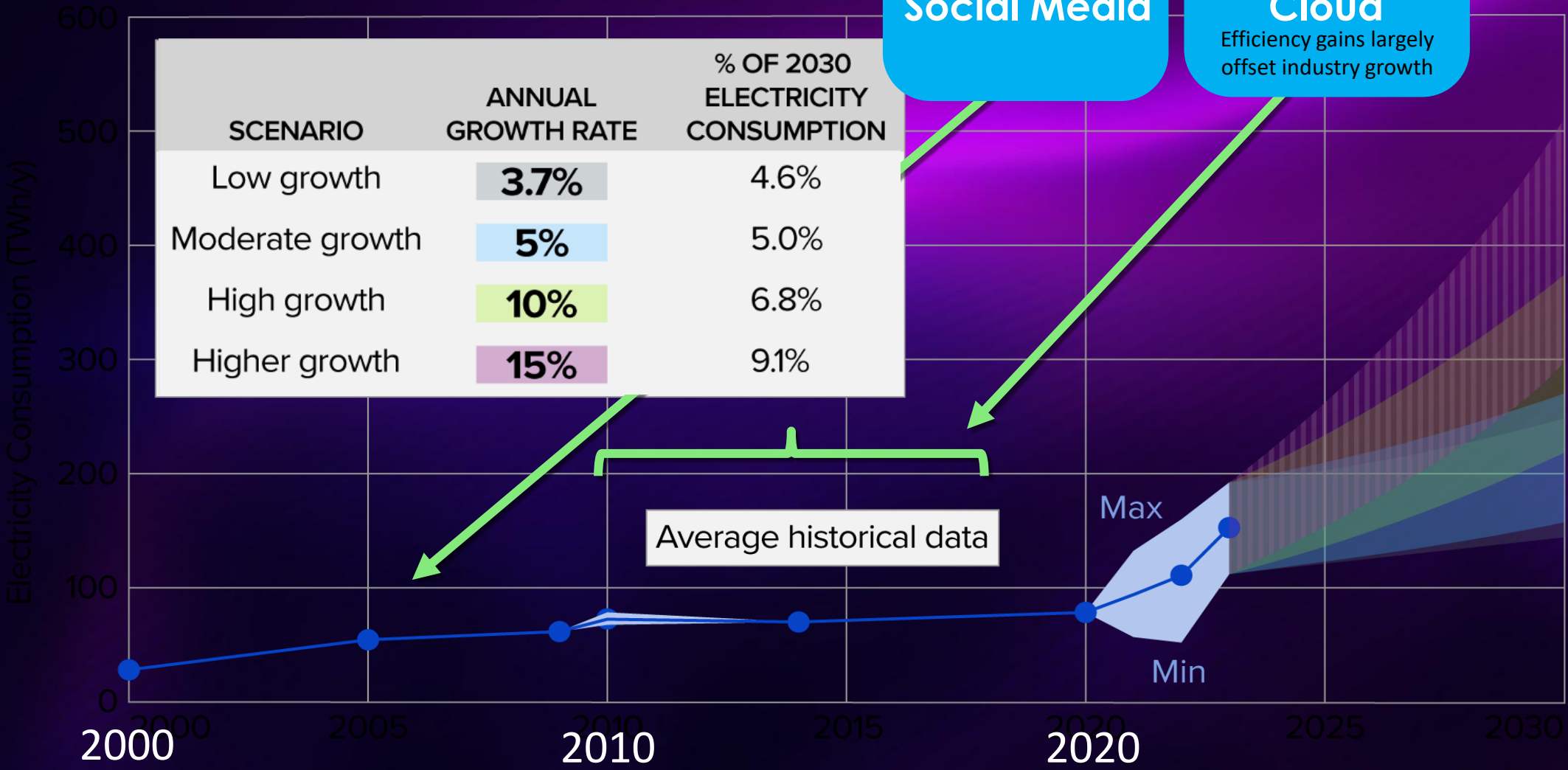


Social Media





# AI is Driving a Third Wave of Data Center Growth



Wave 1  
Early 2000s

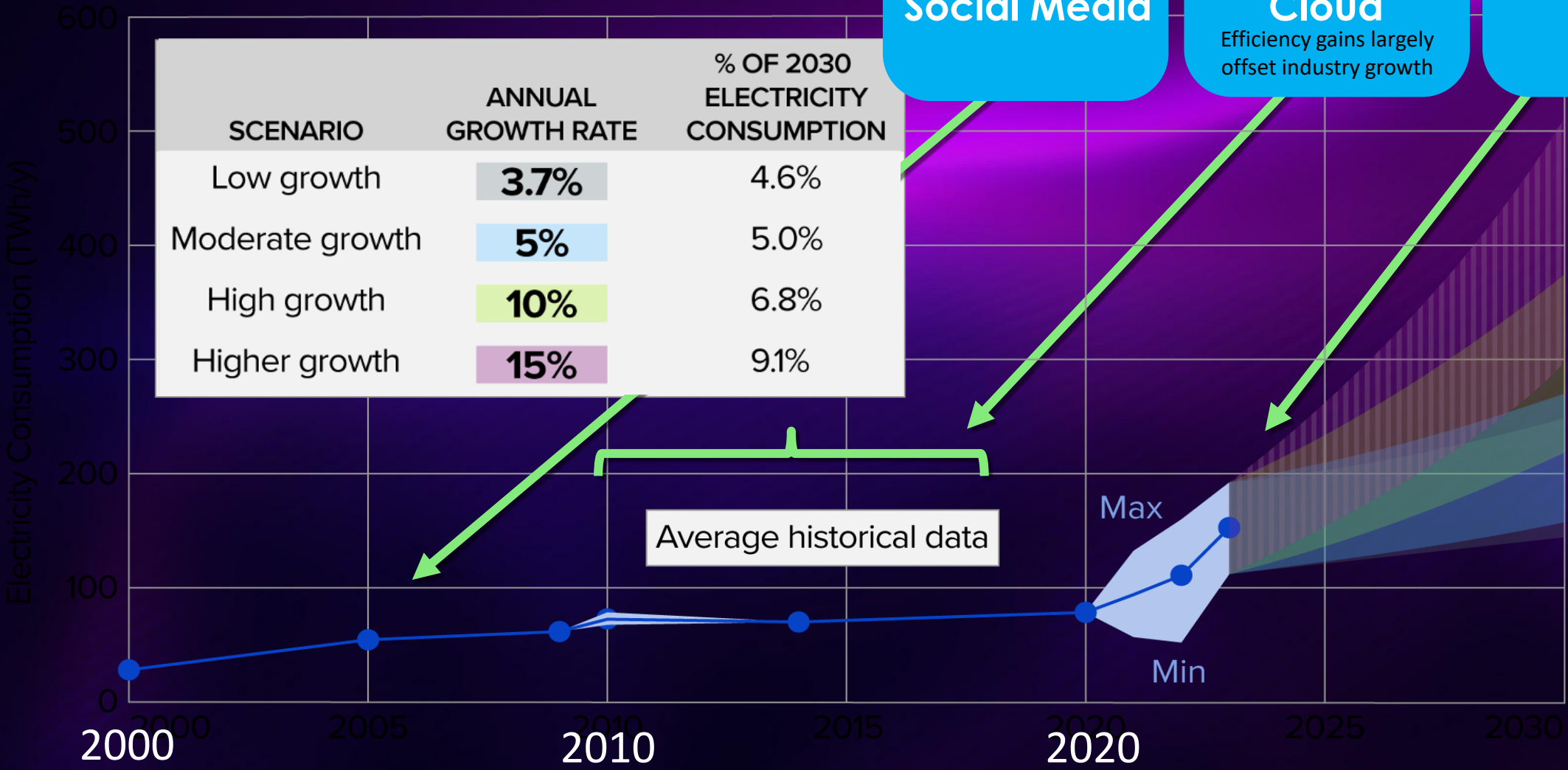
Social Media

Wave 2  
2010-2020

Cloud

Efficiency gains largely offset industry growth

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Wave 1  
Early 2000s



Social Media

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Efficiency gains largely offset industry growth

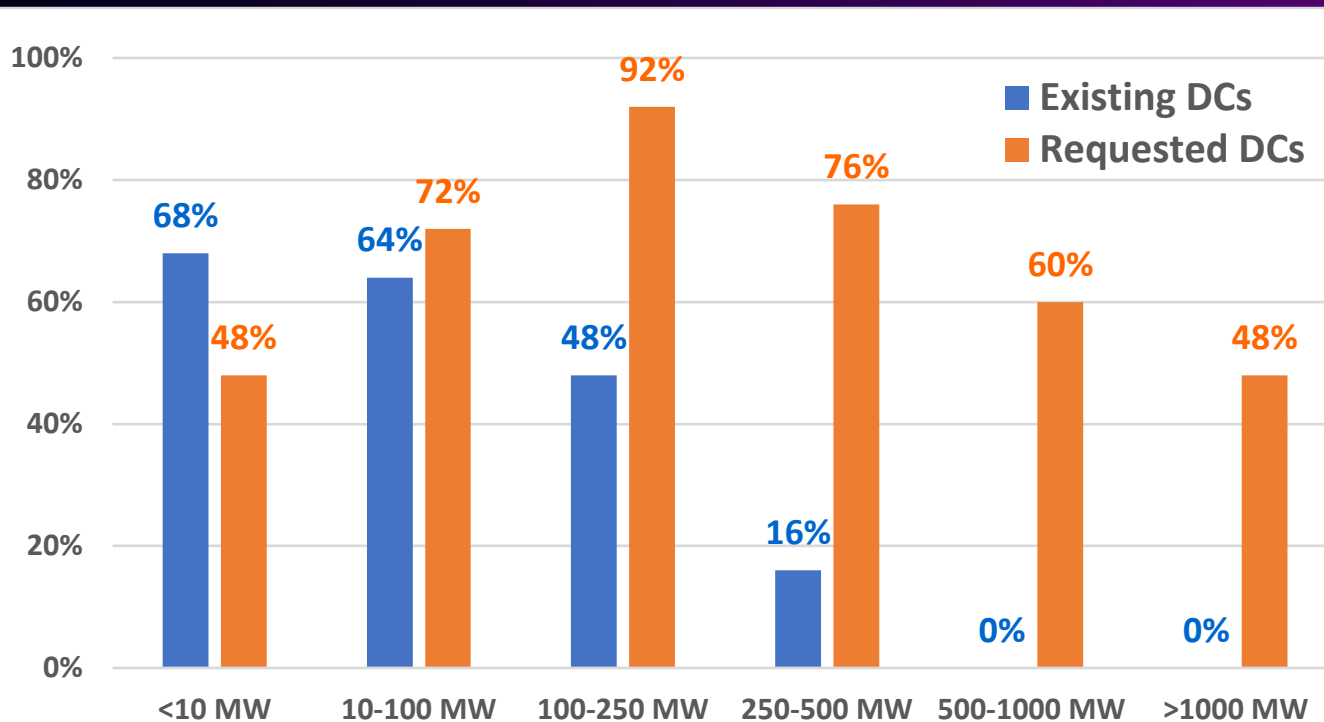
Wave 3  
2023+



AI

# New Data Center Demands Growing

Size of Data Centers Served and New Service Requests  
(% of 25 Utilities Surveyed)



## Key Points From Respondents

- All operating data centers today are less than 500 MW
  - Most < 100 MW
- 60% of respondents have requests for more than 500 MW
- 48% have single requests for more than 1000 MW

Faster than supply and delivery buildout

# Current Pace of AI Scaling – We're Just Getting Started





# What Can We Do to Meet This Demand Growth?



**EXTEND THE LIFE OF TODAY'S ASSETS.**

**INCREASE THE UTILIZATION OF TODAY'S ASSETS.**



**MAKE ROOM TO BUILD NEW ASSETS.**



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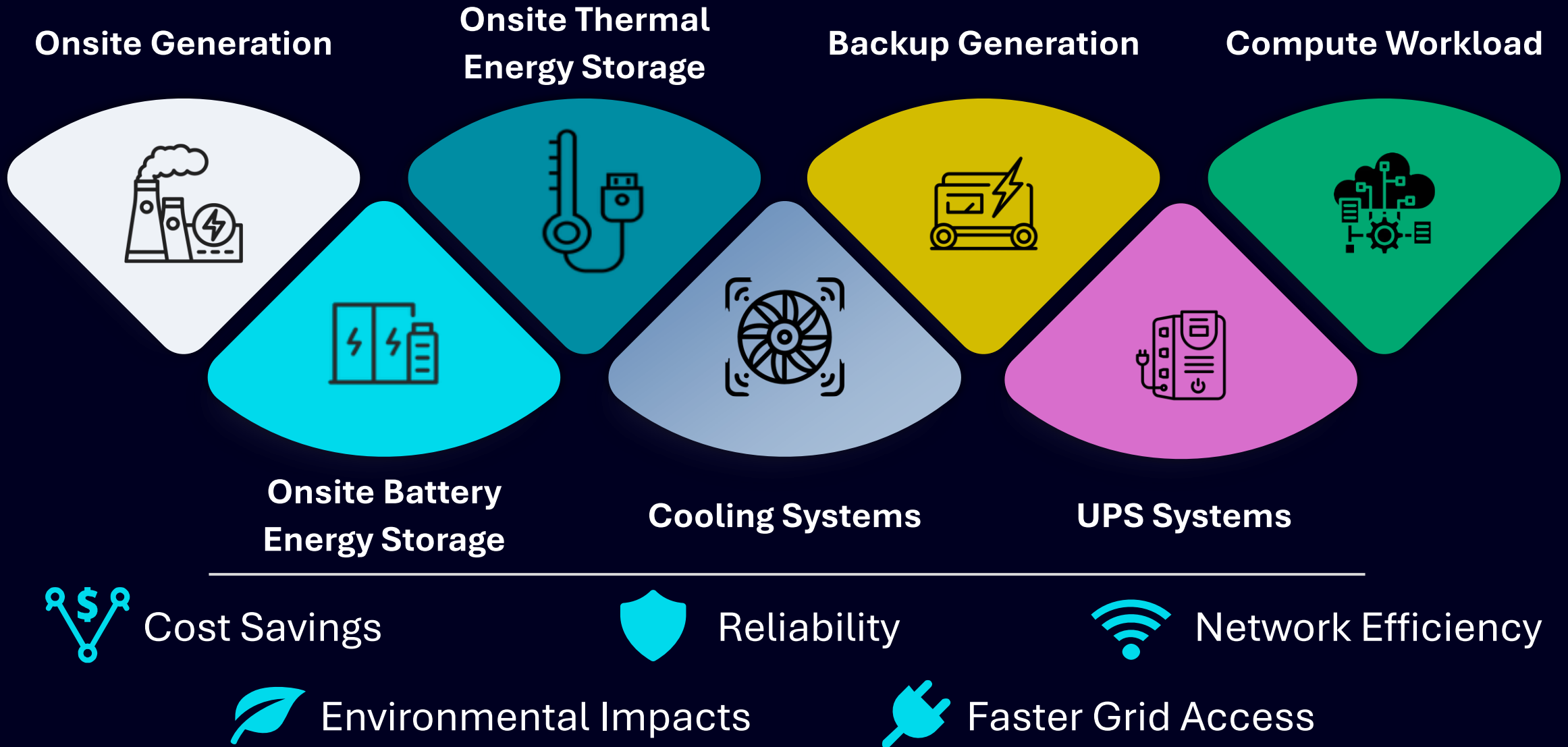
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MAKE ROOM TO BUILD NEW ASSETS.





# Where Does Flexibility Lie Within a Data Center?



# DCFlex Participants

## Developers



## Hyperscalers



## IPP's



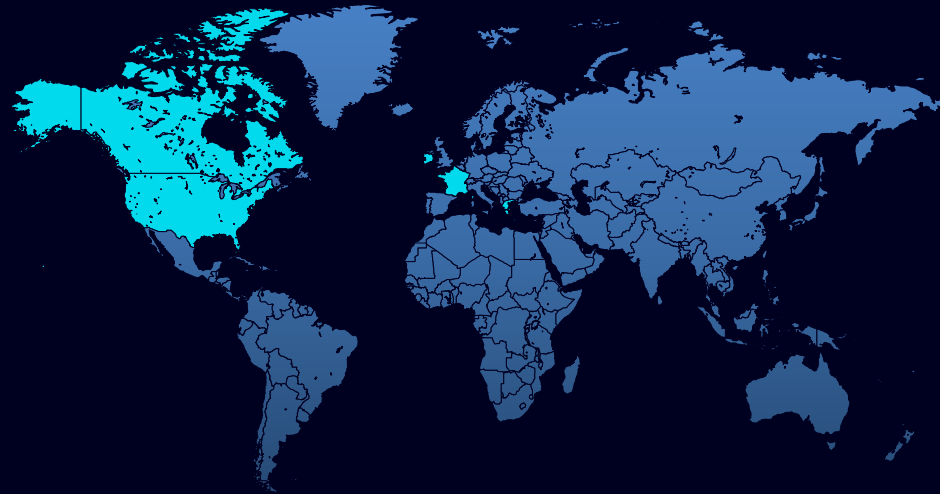
## ISO/RTO



## Other



## Technology Providers



## Utilities





## Cohort 1

### ARIZONA, U.S.

Compute Flexibility  
Artificial Intelligence



### NORTH CAROLINA, U.S.

Compute Flexibility  
Hyperscaler



### PARIS, FRANCE

Grid Services  
Co-Located



Initial Demo Sites:



## Cohort 2



### VIRGINIA, U.S.

Compute Flexibility  
AI & Geospatial Load Shifting



### ILLINOIS, U.S.

Compute Flexibility  
Artificial Intelligence



### ARIZONA, U.S.

HVO Backup Solution



### OKLAHOMA, U.S.

Compute Flexibility

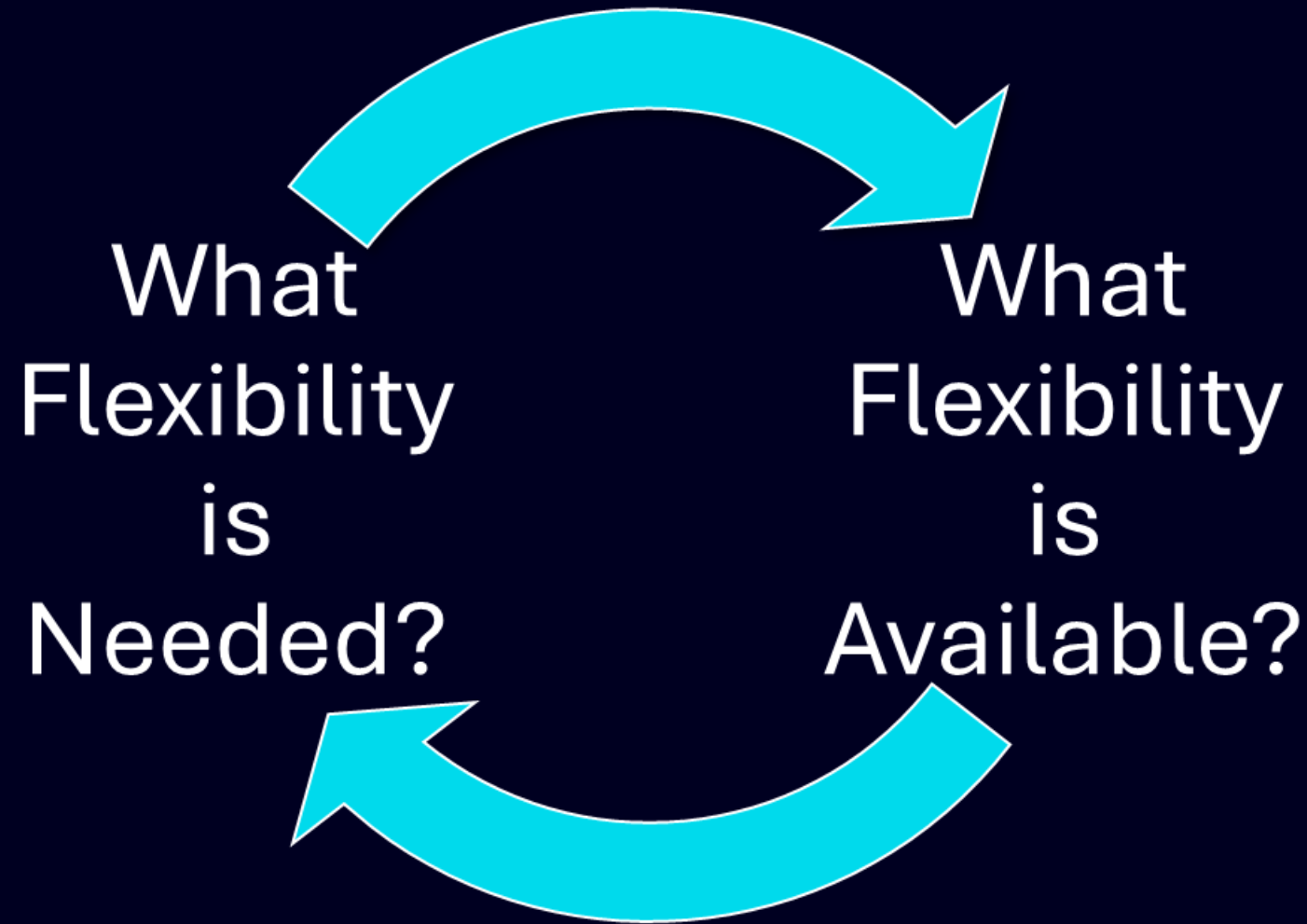
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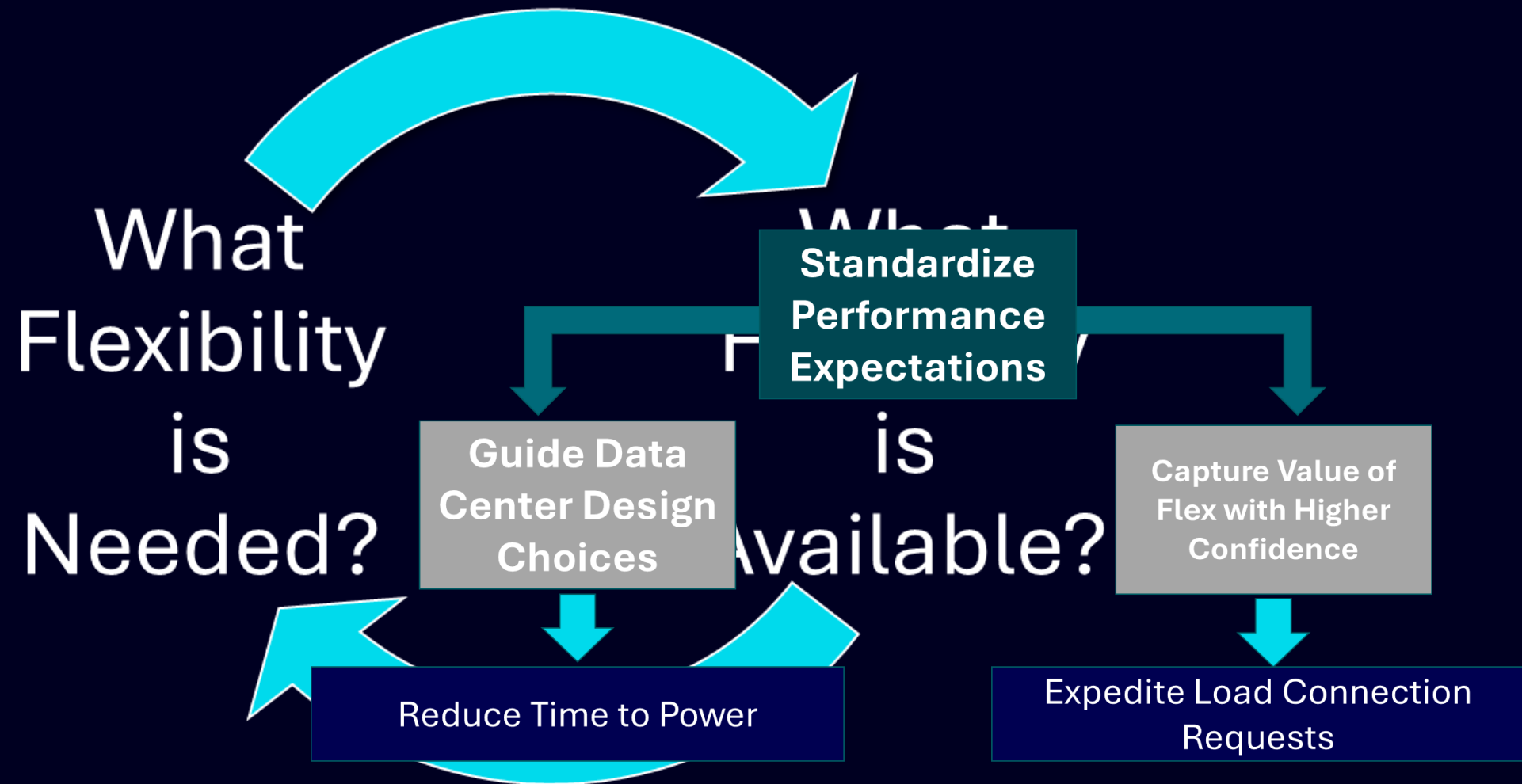
GRDA



# The Reality of Leveraging Flexibility



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## Large Load Flexibility Classification to Unlock Connection

### DCFlex Key Outcome

#### Large Load Flexibility Classification

- A** Supports Grid During Disturbances
- B** Self Serves During Transmission Outages
- C** Supports Grid During Peak Stress
- D** Provides Fast or Long Flexible Response
- E** Acts Like Dispatchable Capacity

#### Accelerate Time to Connection

LINKS TO LOCATIONS WHERE FLEXIBILITY  
UNLEASHES GRID CAPACITY



#### Working Group



Learn More:  
[dcflex.epri.com](https://dcflex.epri.com)



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- Quarterly Webcasts
- DCFlex Spotlight Series
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- DCFlex Collaboration Board
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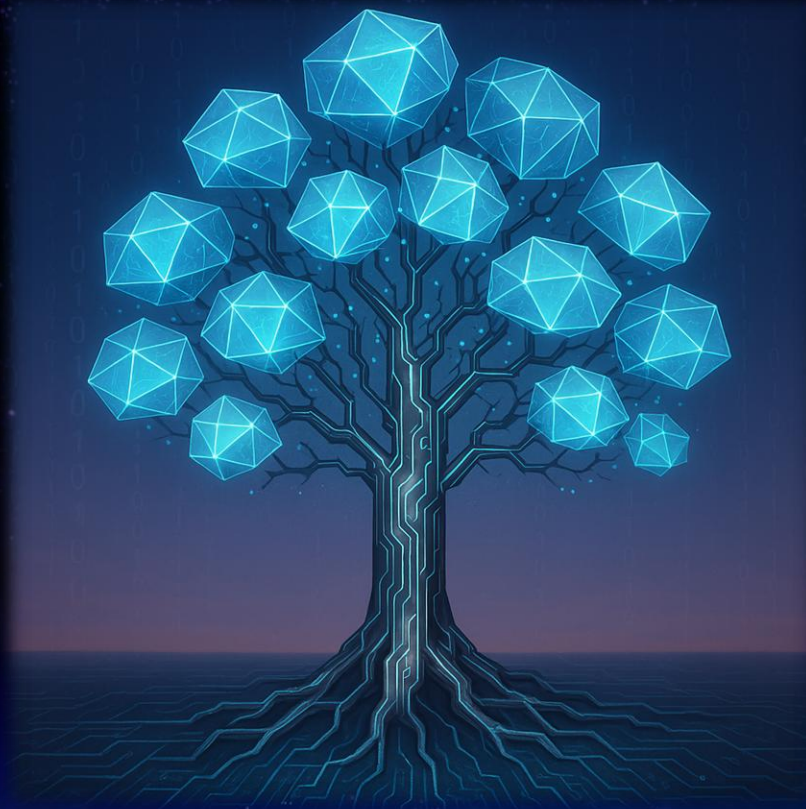


# FORECASTING DATA CENTER ENERGY DEMAND WEBCAST

November 20, 2025 | 3-4 PM ET

- Email [airiarte@epri.com](mailto:airiarte@epri.com) if you would like to attend





A society grows great  
when old men plant trees in whose  
shade they know they shall never sit.





# TOGETHER...SHAPING THE FUTURE OF ENERGY®