

Centeris South Hill Data Center Overview



Executive Summary

Move-in ready Centeris South Hill Data Center is uniquely positioned as a major \$130M+ state-of-the-art data center built to serve modern high capacity, hyperscale, cloud, enterprise and service provider needs now and in the future.

1

Expansive Space



- Private, secure 86-acre campus
- Move-in ready with ability to grow
- Up to 750,000 sq. ft. of additional building space available

2

Extensive Power Availability



- Up to 100MW capacity from onsite electrical substation, currently configured to 50MW with expansion available in 25MW increments
- Dual-fed high capacity power lines provide N+1 resiliency
- Substation considered critical priority power infrastructure as it shares service with adjacent hospital facility

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Rich Power Density



- 8 MW available today, easily expandable to 12 MW
- 3 - 20 kW Highly Energy Efficient Air Cooled cabinets in same data Hall
- 17 - 52 kW High Density, Highly Energy Efficient Water Cooled Cabinets in same data hall

Low Cost of Power



- PSE contracted rate of \$0.054 cost per kWh⁽³⁾
- PSE electricity generated from hydroelectric and wind sources



- The facility has extraordinary amounts of move-in-ready space and power capacity immediately available for buyers seeking a platform showcase data center campus with exceptional ability to grow.

Executive Summary

In addition to impressive size and scale, Centeris South Hill boasts one of the most ecologically advanced and economically advantageous designs, with exceptional characteristics ideal for buyers seeking flexibility, high reliability, scalability and low latency data center solutions.

5 Exceptional Cooling Options



- Air Cooled option uses industry-leading PACE™ 100% outside air cooled handlers
- High density and energy efficient water cooling option available and currently utilized in lower-level 2MW deployment

6 Highly Efficient Ecological Design



- LEED Certified-Gold
- Exceptional 1.3 PUE⁽¹⁾
- Most conservative use of water given outside air cooling capabilities
- Low maintenance costs due to less mechanical equipment

7 Strongly Resilient & Secure Plant



- Built as a building within a building and Class 1 clean room on seismically resilient bedrock, above 500yr flood zone
- Located 30+ miles from downtown Seattle, far outside major nuclear air blast radius
- Protected on private fenced campus with 24x7x365 manned on-site security
- Dual-fed power on same grid as major hospital

8 Ultra-Low Latency Connectivity



- Effective Transpacific Hub™ between Pacific Northwest, Bay Area / SoCal and Asia with ultra-low latency
- Attractive 1ms round trip latency to WBX⁽²⁾ and access to 250+ global carriers
- Dedicated 12 strands dark fiber in a ring configuration between SH1 and WBX
- Additional redundant fiber routes to other key West Coast NAPs and Pacific landing stations



PRIME PACIFIC NORTHWEST LOCATION

At the center of major global communications.

- Pacific Northwest is known for empowering technological innovation
- Robust ultra-low latency connectivity infrastructure provides exceptional connectivity and redundancy to major network access points
- Close proximity to enterprise, hyperscale and SMB customers
- Clean, low-cost energy
- Centrally located In Puyallup's South Hill, Centeris sits within easy access to Seattle metro without in-city risks and limitations



SPACE

Move-in-ready facility with 61,600 square feet total data center hall space available now. (1st & 2nd Floors)

MOVE IN READY

- 61,600+ sf data hall space available TODAY
- 56,600 SF (2nd Floor); 5,000 SF (1st Floor)
- 8 MW commissioned and available NOW

ENVIRONMENTALLY SOUND

- Built LEED Gold
- Electricity generated from hydroelectric and wind sources
- Temperate Northwest climate

HIGH DENSITY

- Highly Efficient Air Cooled Option: 3 to 20 kW cabinets in same data hall (2nd Floor)
- Highly Efficient Water Cooled Option: 17 to 52 kW cabinets in same data hall (1st Floor)
- Combined 3,500 pound floor load

SCALABLE + FLEXIBLE

- Secure private suites
- Custom tailored pods
- Expandable to 12 MW



HIGHLY EFFICIENT AIR COOLED SOLUTION

3 to 20 kW high performance cabinets in same 2nd floor data hall.

56,600 SF COLUMN-FREE DATA CENTER HALL DESIGNED FOR FLEXIBILITY AND GROWTH

- Accommodates full range of requirements including high-power density cages, secure private suites and pods
- Hot aisle containment system with full outside air cooling economizer supported by an evaporative cooling system
- Design facilitates future growth

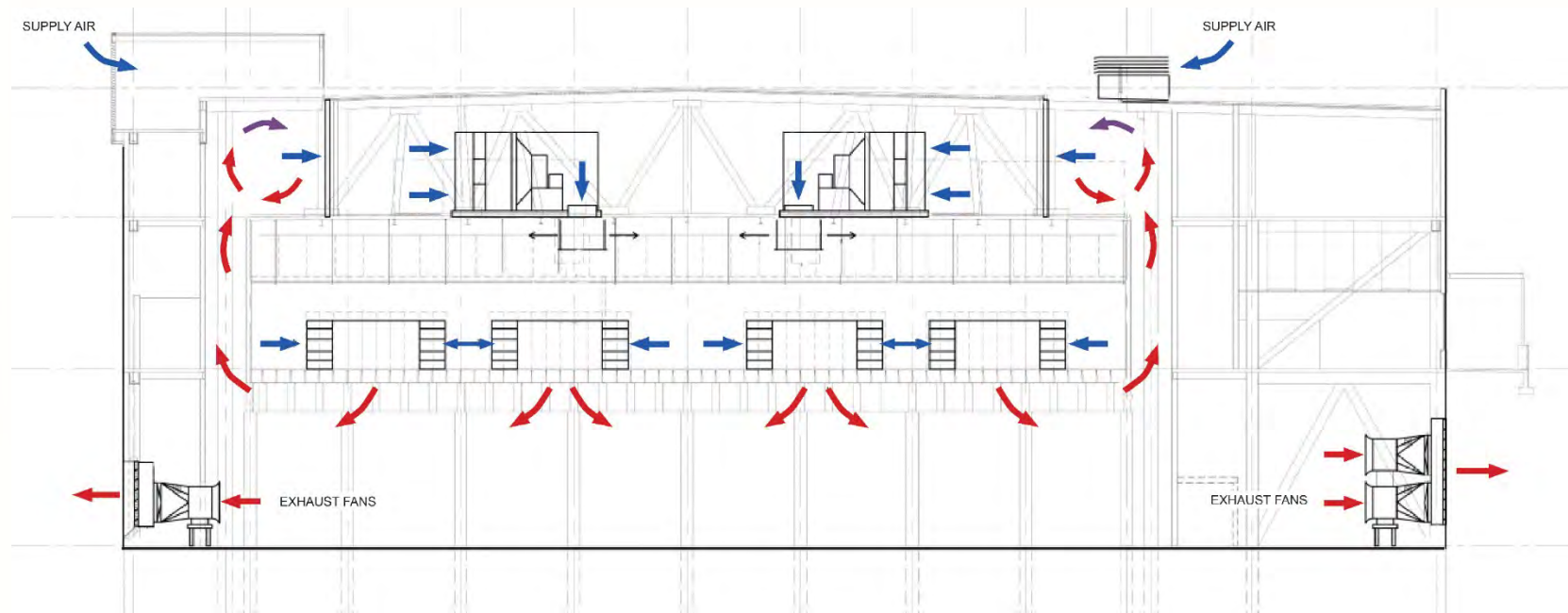


AIR COOLED SOLUTION

Keep your environmental footprint small.

DISTINCTIVE COOLING SYSTEM

- Highly efficient evaporative cooling system utilizing 100% outside air

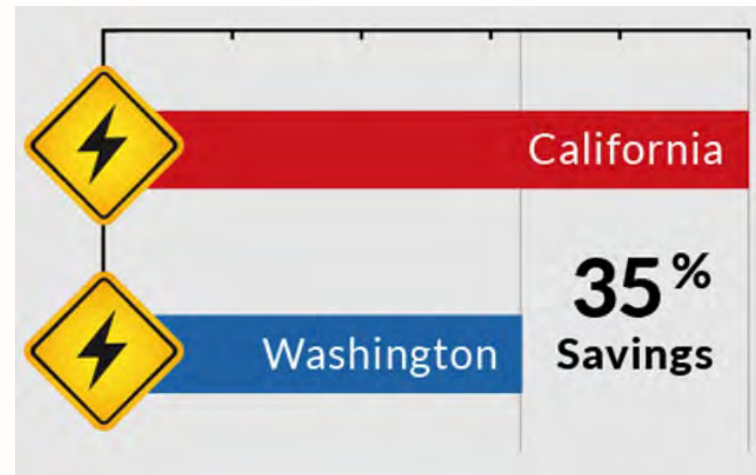


AIR COOLED SOLUTION

Keep your costs low.

MEASURABLE SAVINGS

- Exceptional PUE - saving 35% or more¹ in energy & maintenance costs
- Take advantage of our temperate Pacific Northwest climate



¹ Source: Average facility PUE 1.3 per McKinstry/Lane
Coburn design engineers based on full UPS load

HIGH DENSITY WATER COOLED SOLUTION (2018)

17 to 52 kW highly energy efficient water cooled cabinets in same 1st floor data hall.

5,000 SF DATA CENTER HALL DESIGNED FOR FLEXIBILITY AND GROWTH

- Designed to host high performance, dense, computing systems including the most demanding users in Enterprise Computing, High Performance Computing, and Machine Learning/Artificial Intelligence
- Closed loop water-cooled system increases the efficiency of the heat abatement function
- Localized heat exchange at the cabinet level drives out more of the traditional inefficiencies at this stage
- Focused cooling at the cabinet level
- Design facilitates future growth



HIGHLY ENERGY EFFICIENT WATER COOLED SOLUTION (2018)

N+1 high performance chillers with water side economization.

VARIABLE SPEED CHILLERS REDUCE ENERGY COST

- Designed to facilitate future growth



Extensive Power Availability



Power

- On-site 50 MW substation
 - Expandable in 25 MW increments to 100 MW and beyond
 - Supplied by Puget Sound Energy
- Dual fed by two 115 kV transmission lines
- Designed to host high performance, dense, computing systems
 - 150-300+ W / sq. ft.
 - 3-20 kW cabinets (air cooled)
 - 17-52 kW cabinets (water cooled)
- 100% green facility with electricity generated from hydroelectric and wind sources
 - USGBC LEED Gold Certified

Redundancy & Backup

- Uninterruptible Power Supply (UPS) systems offer true N+1 redundancy for full critical load
- New UPS batteries refresh in 2017
- Backup generators (N+1) for full critical load
 - Nine generators with 21 MW capacity
 - Four 25K gallon fuel tanks on-site



POWER

Robust, redundant backup system (Upgraded in 2014- 2016).

SOLID + DEPENDABLE

- UPS backup (N+1) for full critical load
- Back-up generators (N+1) for full critical load



POWER

Designed for today's high density IT infrastructure.

DEDICATED ON-SITE SUBSTATION

- On-site 50 MW substation expandable in 25 MW increments
- Dual-fed by two 115 kV transmission lines

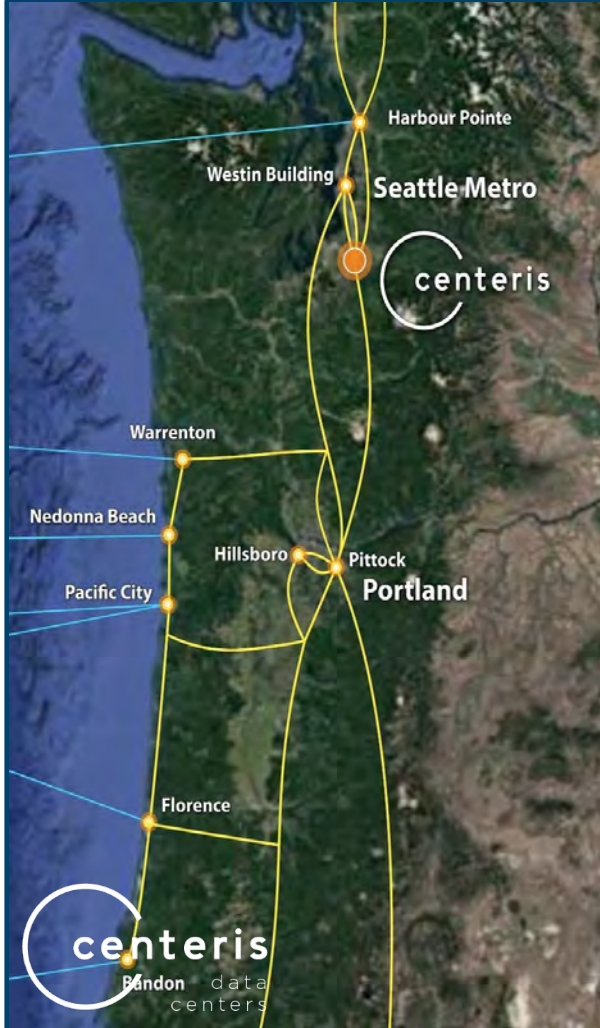


Connectivity



Robust Low Latency Connectivity

Ultra-Low Latency Connectivity



- Dedicated dark fiber connected from SH1 to WBX with 12 strand ring configuration
 - Expands connectivity to 250+ global carriers, service and content providers
 - 1ms round trip latency
 - Built in partnership with Wave Broadband
- Additional fiber routes to Pittock Internet Exchange (OR), 11 Great Oaks (CA), and One Wilshire (CA)
- Low latency from SH1 to key West Coast U.S. markets (PNW, Bay Area & SoCal)
- Access to major Pacific subsea landing stations and networks with direct routes to Asian markets
- Connectivity to major public clouds via WBX and cloud interconnect platforms

SH1 Carrier Neutral Meet-Me Rooms

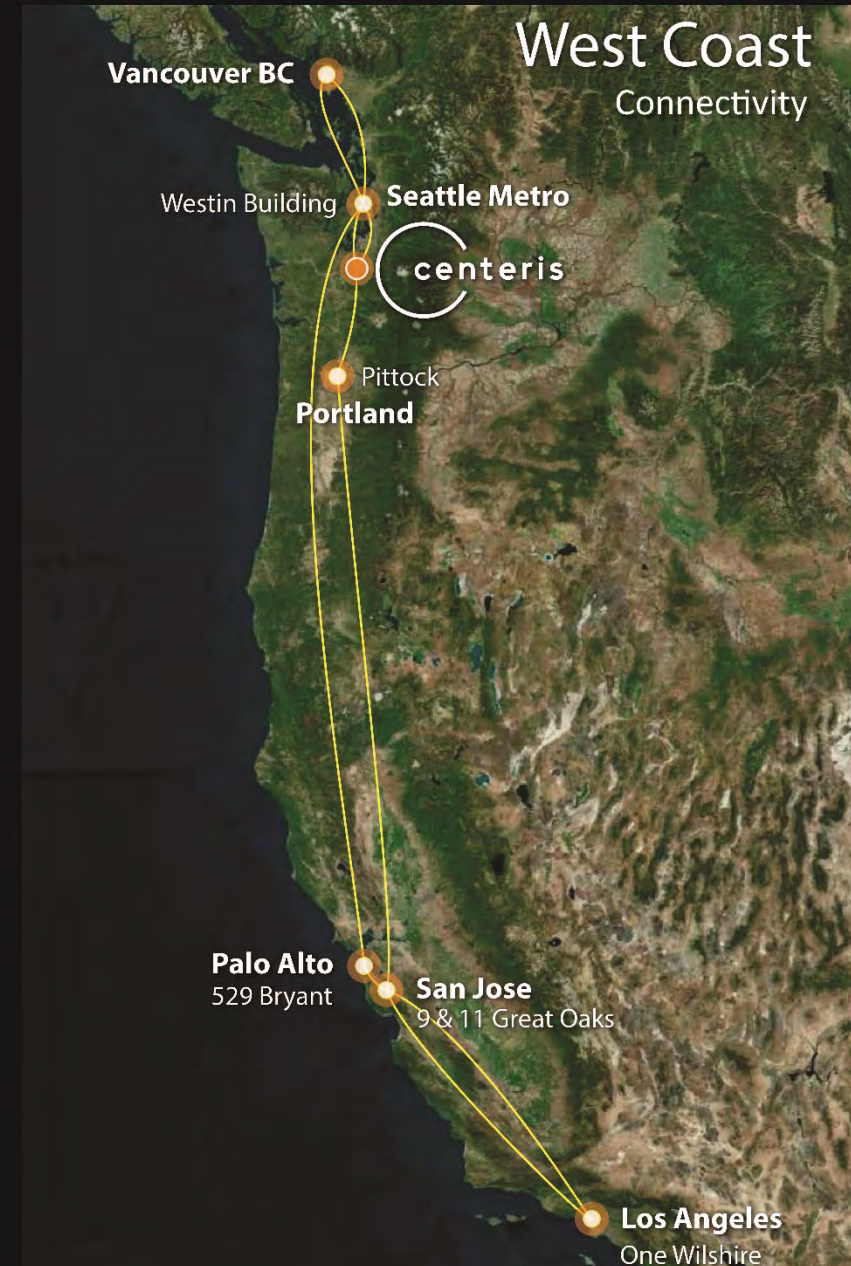
- Directly connected to 7 major carriers in SH1 meet-me rooms
- All carriers have diverse and redundant pathways within SH1 facility



GEOGRAPHIC REDUNDANCY

Carrier Neutral

- Level 3 (N + S), Comcast, CenturyLink, Zayo, Verizon, Wave and Click! available through diverse and redundant pathways
- Looped West Coast north and south fiber routes provide uninterrupted access to dense fiber networks
- Aggregation of key subsea assets



ADVANTAGES

Move-in Ready
with Significant
Capacity to Support
Ongoing Growth





SOLID + SECURE BUILDING & SITE

- Private 86-acre site protected by perimeter and individual building security fencing
- Built on bedrock and constructed to exceed Seismic Zone 4 specifications by 25%
- Located 525 feet above sea level and above the 500 year flood plain
- Near an urban center while simultaneously minimizing environmental risks
- 24 x 365 manned on-site security utilizing card and biometric readers
- 24 x 7 facilities operations team
- CCTV digital camera coverage integrated with access control and alarm system
- Mantraps - isolated shipping and receiving area
- Conference rooms, office space, ample parking, secure, park-like campus, and abundant nearby retail, hotel, healthcare and transit amenities
- DESIGNED FOR SCALABILITY AND GROWTH

Thank You

