PROCONSUL

The Province Without an Industry

A Structural Assessment of Saskatchewan's Datacentre Landscape

Saskatchewan does not have a datacentre industry at the scale the current market requires. It has a narrative about one. The province's entire commercial data centre footprint — approximately 51,000 square feet across eight SaskTel locations and two small managed service providers, the last published figure dating to 2017 — is smaller than a single floor of a mid-tier Toronto facility. Its flagship facility can power fewer than twenty-five modern AI training racks. Its Crown utility cannot deliver the power that proposed developments require on any timeline compatible with the sector's capital deployment speed. Its network topology includes only a small not-for-profit internet exchange with twenty-six peers, no carrier-neutral colocation, and no major content delivery network presence. Its sovereignty claims are one layer deep. And the proposals that anchor the provincial transformation narrative — Carpere Valley's $332 million to $485 million campus in Moose Jaw, Bell Canada's 501,000-square-foot AI Fabric campus outside Regina, and a Saskatoon development referenced in industry reporting — share the same evidentiary status: rezoning applications, not operating infrastructure. Three announcements and zero operating megawatts. This briefing note identifies nine structural limitations, classifies each by lifecycle durability, and presents the findings as Proconsul's baseline assessment of the operating environment. One limitation is categorical — a permanent property of the global compute supply chain that no provincial action resolves. Five are architectural — properties of the utility model, facility design era, network topology, and ecosystem maturity that persist until deliberate structural intervention occurs. Three are implementation-level — resolvable by policy action within existing institutional capacity or when project milestones are delivered. Together they describe a province whose capability narrative systematically mistakes announcements for infrastructure and whose architectural limitations form a self-reinforcing loop that does not break from inside the existing institutional framework. Where public data is absent and Crown entities may hold undisclosed capacity or agreements not reflected in published sources, this assessment names the void and states the condition under which its conclusions must be revised. The document is prepared as context for a working engagement with Prairie2Cloud, whose architecture is specifically designed to operate in the environment this map describes.

Ben Beveridge, Proconsul, 2026

BRIEFING NOTE

TO	Erwin Heuck, P.Eng.
FROM	Ben Beveridge, Proconsul
DATE	February 2026
SUBJECT	**Saskatchewan's datacentre landscape — what the industry narrative contains and what it does not, ahead of our P2C conversation**

Structural Note. This briefing presents Proconsul's independent assessment of the Saskatchewan datacentre industry as it exists in February 2026. The methodology is limitation mapping: a systematic identification of the structural boundaries between what the provincial datacentre ecosystem can do and what it cannot. Every capability claim made about the Saskatchewan market installs an assumption in the reader's mental model. This document tests those assumptions against public evidence, identifies the structural conditions under which they break, and classifies each limitation by its lifecycle durability. All facts are sourced from public filings, press releases, regulatory documents, and industry databases. Where the evidence base is incomplete — particularly where Crown entities may hold undisclosed capacity, agreements, or plans — the document names the void and states the condition under which its conclusions must be revised. No claim is hedged. Where uncertainty exists, it is named and bounded. The document is prepared as context for a working engagement with Prairie2Cloud and is addressed to the engineer who will determine whether Proconsul's structural observations survive contact with operational reality.

PART I

The Capability Narrative

1. What the Market Says About Itself

Saskatchewan's datacentre narrative is assembled from capability claims produced by the entities with the strongest structural incentive to present capability rather than limitation. SaskTel, the Crown-owned telecommunications provider and sole Tier III operator in the province, positions its four colocation facilities in Regina and Saskatoon as enterprise-grade infrastructure with geographic diversity, data sovereignty, and 99.99% uptime. The provincial government frames Saskatchewan's cool climate, low natural disaster risk, affordable land, and Crown utility stability as competitive advantages for data centre investment. Carpere Valley Development Corporation announces a $332 million to $485 million AI data centre and wellness campus in Moose Jaw, with media coverage describing it as the catalyst for Saskatchewan's transformation into a technology hub. Bell Canada files to rezone 160 acres outside Regina for a 501,000-square-foot AI data centre campus under its national AI Fabric initiative, with SaskPower substation support and post-secondary endorsements. The Saskatchewan Chamber of Commerce observes that the province holds 27 of 34 critical minerals identified by the federal government. And the broader Canadian narrative positions the country as a growing data centre destination, with $2 billion in federal budget allocation for AI compute infrastructure.

Each of these claims is accurate within its own frame. Each installs an assumption broader than the evidence supports. And each is produced by an entity that benefits from the assumption's adoption. The capability narrative documents where the industry can sustain scrutiny. The sections that follow map the territory where the evidence is absent.

2. The Implied Assumptions

These capability claims install operative assumptions in the reader's mental model. "Saskatchewan has data centre infrastructure" installs the assumption that meaningful commercial capacity exists for colocation, cloud, or sovereign compute workloads. "Tier III means enterprise-grade" installs the assumption that SaskTel's facilities can serve the compute density, power requirements, and interconnect demands of modern AI and high-performance computing workloads. "Cool climate is a competitive advantage" installs the assumption that Saskatchewan's thermal environment translates to lower operating costs relative to warmer jurisdictions. "SaskPower's grid can support data centre growth" installs the assumption that the provincial grid has surplus capacity or a credible pathway to supply 10 to 150 megawatts of new data centre load. "Data sovereignty means data stays in Canada" installs the assumption that hosting in Saskatchewan provides meaningful protection for sensitive workloads. "Carpere Valley will transform the market" installs the assumption that the proposed facility, with scalable capacity up to 150 megawatts, will proceed substantially as announced. "Bell AI Fabric validates Saskatchewan" installs the assumption that a national telco's rezoning application represents committed capital, when no construction financing, power allocation, or anchor tenant has been disclosed. "Saskatchewan can compete with Alberta" installs the assumption that the province's natural advantages are sufficient to attract capital. And "Crown utility stability is an advantage" installs the assumption that SaskPower's government-owned, vertically integrated structure serves data centre operators better than deregulated alternatives.

Every one of these assumptions is broader than the evidence that produced it. The evidence was generated under controlled conditions by entities with structural incentives to demonstrate capability. The

user operates under uncontrolled conditions where the assumptions must hold without the conditions that produced them. The gap between the evidence and the assumption is the candidate territory for limitation mapping.

PART II

The Structural Boundaries

3. The Capacity Void

Saskatchewan's commercial data centre footprint has been published at three points. In October 2015, SaskTel reported 31,088 square feet across six locations: four in Regina and two in Saskatoon. In January 2017, a new Tier III facility opened at 745 66th Street in Saskatoon (24,000 square feet of building area, 9,650 square feet of initial data hall, expandable to 30,000 square feet). SaskTel then reported 41,000 square feet across seven locations. In February 2017, SaskTel announced the $10.7 million purchase of a Tier III data centre in White City, adding approximately 10,000 square feet. This brings the published total to approximately 51,000 square feet across eight locations. No updated figure has been published since. SaskTel does not disclose utilisation rates, available rack positions, or waitlist data. The most basic question about the provincial market — how much capacity is available right now — is unanswerable from public sources. The Saskatoon North data hall may have been expanded from its initial 9,650 square feet toward its 30,000-square-foot ceiling. It may not have. No disclosure exists. Two additional operators supplement the SaskTel footprint: VDC Virtual Data Corp (now MSP Corp Prairies) with approximately 4,000 square feet of carrier-neutral space, and Krakken IT Services with a minimal colocation presence in Saskatoon.

For context, a single mid-tier colocation facility in Toronto or Montreal offers 50,000 to 200,000 square feet. Cologix's Montreal campus alone exceeds 300,000 square feet. Saskatchewan's total published commercial footprint is smaller than a single floor of a facility that would not be considered notable in any of Canada's three primary data centre markets. The province does not have a data centre shortage. It has a data centre absence at the scale the current market requires. This limitation is classified as Implementation — it is buildable, and new construction resolves it — but the lead time given grid and regulatory constraints is three to seven years, a timeline that makes the limitation effectively architectural for any operator evaluating the province today. If SaskTel holds undisclosed capacity or has expanded Saskatoon North's data hall beyond its initial build, this section must be revised accordingly. The core comparison survives any plausible expansion: even at 80,000 square feet, Saskatchewan's entire commercial footprint would remain smaller than a single mid-tier facility in a primary Canadian market.

4. The Density Ceiling

SaskTel's most capable facility, Saskatoon North at 745 66th Street, has a total power capacity of 2.7 megawatts. This figure is publicly listed and confirmed by multiple directory sources. A single NVIDIA DGX GB200 NVL72 rack — the standard unit of frontier AI training infrastructure as of 2025 — draws 120 to 140 kilowatts. The division is elementary: the province's flagship data centre can power nineteen to twenty-two such racks. A single row in Microsoft's Fairwater facility contains 1,360 kilowatts — half of the Saskatoon North building's entire capacity.

The Tier III certification that anchors SaskTel's market positioning measures facility infrastructure: power redundancy, cooling redundancy, maintenance concurrency. It does not measure rack power density, interconnect bandwidth, GPU readiness, or AI workload support capability. The certification was designed for the enterprise IT era at 5 to 15 kilowatts per rack. The AI era operates at 40 to 140 kilowatts per rack. The certification framework measures the wrong properties for the workload class that now defines the market. This limitation is Architectural: SaskTel's existing facilities cannot be retrofitted to modern density

without new power distribution, cooling infrastructure, and structural work that approaches new-build cost. It persists until purpose-built high-density facilities are designed and constructed.

5. The Grid Bottleneck

SaskPower's available generating capacity was 6,125 net megawatts as of September 2025, per the Corporation's Q2 2025–26 financial report. Annual peak demand was 3,838 megawatts (March 2025). The apparent surplus of roughly 2,300 megawatts does not represent deliverable capacity for new industrial loads. System reserve margins, transmission constraints, and the retirement of coal generation — Poplar River at 582 megawatts and Boundary Dam at 531 megawatts, with the provincial government evaluating life extensions beyond 2030 under the Saskatchewan First Energy Security Strategy — consume a significant portion of the apparent headroom. New generation under construction (the 370-megawatt Aspen Power Station near Lanigan, targeting late 2027) and recently commissioned capacity (200-megawatt Bekevar wind facility) are committed to replacing retiring generation and meeting projected organic demand growth, not to serving new large industrial loads.

SaskPower is not a closed system. Interprovincial and international interconnections provide additional capacity. Existing tie-line capacity includes 150 megawatts with the Southwest Power Pool (United States), 350 megawatts with Manitoba, and 150 megawatts with Alberta. Manitoba Hydro supplies up to 315 megawatts of renewable hydroelectric power annually under long-term agreements, delivered via the Birtle Transmission Project completed in 2021. In August 2022, SaskPower signed a 20-year agreement with the Southwest Power Pool to expand transmission capacity to 650 megawatts, targeting 2027. Environmental approval for the Canadian infrastructure was received in March 2025. These imports will total approximately 1,150 megawatts of interconnection capacity once the SPP expansion is operational. However, imported power is contracted for grid reliability and renewable integration — not for new industrial base load. Whether any of this capacity is available for large data centre loads depends on SaskPower's internal allocation decisions, which are not publicly disclosed.

SaskPower has also established SaskNuclear as a wholly owned subsidiary to advance nuclear small modular reactor development. The GE Hitachi BWRX-300 has been selected as the preferred technology, with two sites near Estevan under evaluation. A final investment decision is not expected until 2029, with potential commercial operation in the mid-2030s. In January 2026, the province announced it is formally evaluating large nuclear reactor technologies in parallel, with a deployment timeline of fifteen to twenty years. Nuclear generation is the province's most significant planned addition to baseload capacity. Its timeline is measured in decades, not the months that data centre capital deployment requires.

The Carpere Valley proposal describes a data centre with scalable power capacity up to 150 megawatts, though Carpere's own project information sheet indicates the combined facilities — data centres, healthcare venue, and greenhouses — will use 15 to 54 megawatts at initial deployment. Even at the lower figure, a new 15-megawatt industrial load requires a power allocation that SaskPower's planning cycle (three to seven years for new generation) cannot provide on a timeline compatible with data centre capital deployment (twelve to twenty-four months). At the aspirational maximum of 150 megawatts, the load represents 2.4 percent of the province's available generating capacity. The verb "working with SaskPower to secure power" in Carpere's public statements reveals the structural condition: the power does not currently exist in allocated form. This limitation is Architectural, bound to SaskPower's vertically integrated planning model. It resolves only through utility reform, new generation, or expanded imports — all multi-year undertakings.

6. The Interconnect Desert

Saskatchewan has one internet exchange: YXEIX, the Saskatoon Internet Exchange, a not-for-profit organisation operating at Innovation Place (121 Research Drive) and two downtown Saskatoon locations. YXEIX has twenty-six peers and a total port speed of 403 gigabits as of January 2026. It is listed on PeeringDB. Its peer list includes Hurricane Electric and Packet Clearing House but no major content delivery networks (no Google, no Akamai, no Cloudflare, no Meta, no Amazon). Compare YYCIX in Calgary: eighty-nine peers across seven facilities with a 400-gigabit mesh, including Amazon, Cloudflare, Fastly, Google, and Akamai, with multiple carrier-neutral operators interconnected. Or MBix in Winnipeg, operating in a region with substantially greater network density. YXEIX represents genuine local peering infrastructure. It does not represent the interconnection density that data centre operators evaluating a site for cloud, AI, or content delivery workloads treat as a prerequisite.

No carrier-neutral colocation facility operates in Saskatchewan. All four SaskTel colocation locations are on SaskTel's network. VDC at 116 Research Drive, adjacent to the YXEIX switch at 121 Research Drive, describes itself as carrier-neutral, but the facility is approximately 4,000 square feet — not a scale that attracts diverse carrier presence. There is no mechanism for a major operator to interconnect with multiple carriers, cloud on-ramps, and content networks within Saskatchewan without transiting SaskTel infrastructure or building its own transport to Calgary or Winnipeg.

Latency confirms the structural position. The fibre distance from Saskatoon to Calgary is approximately 750 kilometres, yielding a theoretical minimum round-trip time of roughly 7.5 milliseconds; real-world RTT is estimated at 8 to 12 milliseconds. Saskatoon to Toronto via Winnipeg spans approximately 3,200 kilometres of fibre, yielding an estimated RTT of 30 to 40 milliseconds. For AI training workloads requiring tight GPU-to-GPU communication, intra-facility interconnect matters more than wide-area networking, and these latencies are irrelevant. For inference serving, edge compute, content delivery, and any latency-sensitive application, 30 to 40 milliseconds to Toronto places Saskatchewan at a material disadvantage relative to Ontario, Quebec, or even Alberta. The 8 to 12 milliseconds to Calgary is survivable for most workloads but requires the Calgary interconnection infrastructure that Saskatchewan does not itself possess.

Fibre diversity is similarly constrained. Two primary corridors serve the province: east through Manitoba and west through Alberta. No redundant intra-provincial backbone provides diverse routing independent of neighbouring provinces' infrastructure. Every published evaluation of Saskatchewan as a data centre destination that Proconsul has identified emphasises four variables: climate, land, disaster risk, and power. Network topology — the variable that data centre operators treat as a prerequisite — is absent from most assessments or noted only as an aspiration. The limitation is Architectural: Saskatchewan's network topology is a function of its geographic position, population density, and the circular dependency between interconnection demand and facility investment.

7. Sovereignty Theatre

SaskTel's market positioning includes the claim that "your data never leaves Canada." This is a hosting claim, not a sovereignty claim, and the distinction is consequential for any workload where sovereignty is the requirement rather than the aspiration.

Sovereignty operates at three levels. Full-stack sovereignty requires Canadian ownership and control at every layer: silicon, firmware, operating system, hypervisor, orchestration, application, and physical facility. No jurisdiction that depends on foreign-designed silicon and foreign-controlled software achieves this. Marketing sovereignty is the assertion of sovereignty based on data residency alone, without acknowledging the layers where foreign jurisdiction applies. It generates confidence in the user's mental model that extends across every layer of the stack, because the word "sovereign" does not come with a footnote explaining where it stops. Between these extremes sits operational sovereignty: Canadian physical custody, Canadian-controlled access logging, Canadian-operated orchestration and identity management, and exclusive Canadian jurisdiction over facility entry and data retrieval. Operational sovereignty does not eliminate the CLOUD Act risk on US-headquartered software vendors. It does establish an auditable chain of custody, restrict physical access to Canadian-cleared personnel, and create a legal framework where Canadian courts have exclusive authority over facility operations. For healthcare data, provincial government workloads, municipal digital twins, and Crown corporation operations, operational sovereignty may be sufficient. For defence, intelligence, or workloads requiring protection from Five Eyes intelligence-sharing, it is not.

SaskTel is Crown-owned. The physical infrastructure layer delivers genuine Canadian sovereignty. But the compute hardware — CPUs from Intel or AMD, GPUs from NVIDIA or AMD — is designed by American companies subject to United States jurisdiction. The firmware is written by American or Taiwanese entities. The operating systems are controlled by Microsoft, Red Hat (IBM), or Canonical. The hypervisors, orchestration platforms, and AI frameworks are overwhelmingly American products. And the legal instruments that can compel data access — the US CLOUD Act of 2018, FISA Section 702, Five Eyes intelligence-sharing frameworks — apply to US-headquartered companies regardless of where the data is physically stored.

The full-stack limitation is Categorical. It is not a property of Saskatchewan's choices or SaskTel's architecture. It is a property of the global compute supply chain. No jurisdiction that depends on foreign-designed silicon and foreign-controlled software achieves full-stack sovereignty regardless of how many facilities it builds or where it locates them. But the operational sovereignty layer — physical access control, custody chain, orchestration independence — is achievable and may be sufficient for the majority of workloads that currently cite "sovereignty" as a requirement. The practical question for any Saskatchewan data centre operator is not whether full-stack sovereignty is possible (it is not) but whether operational sovereignty at the infrastructure layer satisfies the compliance regimes and threat models that actual customers present.

8. The Carpere Evidentiary Gap

The Carpere Valley proposal in Moose Jaw — valued at $332 million to $485 million — is the largest data centre project ever announced in Saskatchewan and the centrepiece of the provincial narrative that the market is transforming. Carpere Canada purchased the former Valley View Centre site in 2020. A project launch ceremony was held at the Grant Hall Hotel in June 2025. Media coverage from MooseJaw Today,

SaskToday, and Discover Moose Jaw describes the project in aspirational terms drawn directly from the developer's own materials: "Canada's first AI wellness town," "the fastest-growing tech hub in the world."

The evidentiary basis for these claims is the developer's press event. As of February 2026, no construction financing has been disclosed. No power purchase agreement or power allocation from SaskPower has been announced. No anchor tenant or pre-lease commitment has been named. No construction permit has been issued. A rezoning application has been submitted, with a public hearing anticipated. The developer states the project will be self-financed through Carpere Canada and its parent, BitForest Investment, whose portfolio is described in general terms without published financials. The 150-megawatt figure cited in media coverage is the data centre's scalable maximum capacity. Carpere's own project information indicates the combined facilities — data centres, healthcare venue, and greenhouses — would use 15 to 54 megawatts at initial deployment.

The limitation is not that Carpere Valley will fail. It may well proceed. The limitation is that the provincial narrative treats an announcement as evidence of market transformation. The evidentiary distance between a press event at a hotel and a 150-megawatt operating data centre is measured in years and hundreds of millions of dollars of demonstrated capital deployment. Every data point in the public domain originates from the entity with the strongest incentive to present capability. This is classified as Implementation: it resolves if Carpere delivers disclosed milestones. But the milestones that would convert this from a concept-stage proposal to a committed development — financing, power agreement, anchor tenant, construction start — have not been achieved.

9. The Bell Indicator

In February 2026, Bell Canada filed with the Rural Municipality of Sherwood to rezone approximately 160 acres of agricultural land south of Regina to light industrial, for construction of an AI data centre campus. The filing was submitted through a numbered company, 102226744 Saskatchewan Ltd., but supporting documentation from Saskatchewan Polytechnic and the University of Regina identified the proponent as Bell. The campus is part of Bell's national AI Fabric initiative, announced in 2025, which targets up to 500 megawatts of capacity across at least six facilities nationwide, with initial sites in British Columbia.

The proposed campus would see multiple 50-megawatt buildings developed across the site, totalling approximately 46,575 square metres — 501,000 square feet. The first building, spanning 8,500 square metres, could see development begin in 2026. The filing describes a SaskPower substation on site to deliver required power. The campus would include a future commercial and industrial development along Park Street Road, potentially including research greenhouses reclaiming waste heat in partnership with the University of Regina. Saskatchewan Polytechnic is negotiating a memorandum of understanding with Bell around applied research, workforce development, and sustainability.

Bell is a materially different class of entrant than Carpere. It is a national telecommunications company with disclosed capital, existing infrastructure across Canada, and a track record of large-scale facility delivery. The AI Fabric initiative is a corporate-level strategic commitment, not a single-project proposal. The City of Regina waived the concept plan requirement for the rezoning. SaskTel, the Ministry of Highways, and the Water Security Agency raised no objections. This is the first credible national operator to target the province.

The evidentiary status, however, is the same. As of February 2026, no construction permit has been issued. No power allocation from SaskPower has been confirmed. No anchor tenant or customer commitment has

been disclosed. The detailed campus design has not been submitted. The project is at the rezoning stage — precisely the same procedural position as Carpere, separated by a different class of proponent. Bell's entry is noteworthy. It is not yet evidence of a functioning industry. This limitation is classified as Implementation: it resolves when Bell delivers disclosed milestones. The milestones that would convert this from a rezoning filing to a committed development — construction financing, power agreement, detailed design approval, construction start — have not been achieved.

10. The Crown Utility Lock

SaskPower is a vertically integrated Crown utility: generation, transmission, distribution, and retail in a single government-owned entity. The provincial narrative frames this as stability. The stability is real. Regulated rates, long-term planning, universal service — these are genuine properties of the Crown model, and they serve residential and agricultural consumers well.

They are the wrong properties for large industrial consumers with urgent, flexible power requirements. In Alberta, a data centre operator can contract directly with a gas generator, install behind-the-meter generation, participate in the deregulated wholesale market, or negotiate a power purchase agreement with an independent producer — all without utility planning approval. Alberta published its AI Data Centre Strategy in 2024, including a "data centre concierge" programme for expedited approvals, no carbon tax on data centre electricity, and a deregulated market that allows operators to move at capital deployment speed. Saskatchewan has published no equivalent strategy. There is no deregulated wholesale market. There is no direct-to-consumer pathway from independent power producers. There is no behind-the-meter generation framework that does not require SaskPower interconnection approval. And SaskPower's planning cycle of three to seven years for new generation is incompatible with a sector where capital deployment timelines are measured in months.

The limitation is Architectural. The Crown utility monopoly is a structural property of Saskatchewan's electricity sector, protected by legislation and sustained by political consensus across party lines. Deregulation is not on any published policy agenda. The stability and responsiveness trade-off is not a bug in the Crown model. It is the Crown model. And it resolves only through legislative reform that creates alternative power procurement pathways — a multi-year, politically contentious process that no party has initiated.

11. The Ecosystem Void

Saskatchewan has no managed service providers of meaningful scale operating data centre infrastructure. No GPU cloud operators. No AI-specific hosting providers. No carrier-neutral colocation beyond SaskTel's captive facilities and VDC's modest independent footprint. No workforce pipeline producing data centre operations professionals beyond SaskTel's internal staff. No ASME-certified vacuum vessel fabrication capacity inventoried for novel thermal infrastructure. No supply chain of high-voltage electrical engineers with data centre design experience.

An operator entering Saskatchewan builds everything from scratch, including the workforce. This is not a gap that a single flagship project fills — or three. Ecosystems are emergent properties that require anchor tenants, workforce development programmes, supply chain density, and policy infrastructure to function. Saskatchewan lacks all four. The limitation is Architectural, resolving over five to ten years with deliberate intervention — not through project announcements, however large or numerous.

The province's observed response to the data centre opportunity follows and then multiplies the dominant pattern for Saskatchewan economic development: attract developers, announce flagship projects, and describe the announcements as transformation. Three proposals now exist — Carpere in Moose Jaw, Bell in Regina, and a Saskatoon development referenced in industry reporting — and zero operating megawatts of new AI-class compute capacity have been delivered. SaskTel itself issued a request for prequalification in August 2025 for a Tier III data centre for artificial intelligence workloads, acknowledging that its existing facilities cannot serve the market the province claims to be building. The pattern reproduces the operational model the province has applied to potash, uranium, and oil and gas — resource extraction sectors where a single anchor investment can define a market. Data centre infrastructure is not a resource extraction sector. It is an ecosystem-dependent sector where density, diversity, and interconnection create value that no single facility can generate alone. The pattern is wrong for the sector. Three instances of the pattern do not make it right.

PART III

The Limitation Portfolio

12. Classification and Lifecycle Durability

Each limitation is classified by the structural level at which it operates, which determines how long it persists and what kind of intervention resolves it. Implementation limitations are version-specific: they exist because of a current policy choice or project status and resolve when the choice changes or the project delivers. Architectural limitations are system-specific: they persist because of the design of the provincial utility model, the facility architecture, or the ecosystem structure, and resolve only when those systems are redesigned. Categorical limitations are paradigm-specific: they are properties of the global compute supply chain itself and persist indefinitely regardless of provincial action.

#	Limitation	Classification	Persistence
1	Capacity void	Implementation	Buildable, but 3–7 year lead time given grid/regulatory constraints
2	Density ceiling	Architectural	Existing facilities cannot retrofit to 40–140 kW/rack. Requires new build.
3	Grid bottleneck	Architectural	SaskPower planning cycle incompatible with sector deployment speed
4	Interconnect desert	Architectural	Small IXP (26 peers), no carrier-neutral DC, no major CDN presence.
5	Sovereignty theatre	Categorical	Full-stack: property of global supply chain. Operational: achievable.
6	Carpere evidentiary gap	Implementation	Resolves if milestones achieved. Monitor quarterly.
7	Bell indicator	Implementation	Credible proponent, same procedural status. Monitor quarterly.
8	Crown utility lock	Architectural	Requires legislative reform. No published policy agenda.
9	Ecosystem void	Architectural	5–10 year resolution with deliberate intervention.

The architectural limitations are mutually reinforcing. Operators cannot be attracted without density. Density cannot be built without power. Power cannot be secured without utility reform. Utility reform cannot be justified without operator demand. The four core architectural limitations — density, grid, Crown utility lock, and ecosystem void — form a self-reinforcing loop that does not break from inside the existing institutional framework. The interconnect limitation operates in parallel: interconnection density requires facilities, facilities require interconnection, and neither Saskatchewan's small IXP nor its captive carrier infrastructure breaks the cycle.

13. What Remains Unmapped

Five bodies of evidence remain unmapped. First, SaskTel's actual utilisation and available capacity across its colocation facilities: no public data exists, and the Saskatoon North data hall's expansion status is undisclosed. SaskTel's own August 2025 request for prequalification for a Tier III data centre for artificial intelligence workloads signals that the Crown telco recognises its existing facilities cannot serve AI-class demand — but the scope, timeline, and power requirements of any resulting project remain undisclosed. Second, SaskPower's internal assessment of deliverable capacity for large industrial loads: the utility knows the answer to the grid bottleneck analysis and has not published it. Third, the pipeline of data centre enquiries the province has received and declined or lost: how many operators have evaluated Saskatchewan and chosen Alberta, Ontario, or Quebec? Those decisions are the structural evidence this map cannot yet reach. Fourth, the provincial workforce inventory for data centre operations, high-voltage electrical engineering, and specialised fabrication: the workforce constraint may be the binding limitation that no published analysis addresses. Fifth, the insurance market's assessment of Saskatchewan data centre risk: AI-density facilities at 40 to 140 kilowatts per rack are becoming insurance-hostile without proven thermal containment, demonstrated fire suppression architecture for GPU racks, and historical loss data. Saskatchewan's underwriter landscape is shallow, and if premiums land 30 to 60 percent higher than comparables in established markets due to lack of ecosystem benchmarks and local adjuster expertise, the cost of capital shifts materially. Has any underwriter evaluated a Saskatchewan data centre proposal, and what terms were offered or declined?

Two additional structural observations warrant note. First, water: modern AI data centres at GB200-class density require liquid cooling. Even closed-loop systems need initial fill, periodic maintenance, and water treatment infrastructure. Saskatchewan's water availability, water licensing framework, and the specific water situation at any candidate site are unaddressed in every published provincial data centre assessment. For a province whose narrative emphasises natural advantages, water is a conspicuous omission. Second, the cold climate advantage is partially self-defeating for the facilities the market now requires. If cutting-edge AI facilities use direct-to-chip liquid cooling — as Microsoft's Fairwater demonstrates — the cooling cost advantage of cold ambient air shrinks dramatically. Saskatchewan's climate advantage is real for air-cooled legacy infrastructure at 5 to 15 kilowatts per rack and largely irrelevant for the liquid-cooled facilities that modern density demands. The narrative's strongest natural advantage applies to the infrastructure class that the density ceiling section has already shown to be structurally obsolete.

Finally, a statement of falsifiability. This assessment is built on public evidence. Crown entities routinely hold capacity, agreements, and strategic plans that are not publicly disclosed. If SaskTel possesses undisclosed deliverable capacity, expansion plans, or interconnection agreements; if SaskPower holds uncommitted firm capacity or industrial power allocation programmes not reflected in published reports; if either entity has entered into arrangements with data centre operators under non-disclosure — then material sections of this map must be revised. The document names nine limitations. It does not claim omniscience. It claims that on the evidence available to a diligent external observer, these nine limitations exist and are classified correctly. The invitation to Erwin is to identify where the evidence is wrong, where the classification is wrong, and where undisclosed information changes the assessment. The document is designed to be tested, not defended.

PART IV

The P2C Context

14. Why This Map Matters for the Conversation Ahead

Prairie2Cloud's architecture — islanded gas turbine microgrid, behind-the-meter generation, sovereign colocation structure, Belle Plaine site on the Carbon Corridor — is designed, whether by explicit intention or operational necessity, to route around every architectural limitation identified in this map. The islanded microgrid eliminates the grid bottleneck: P2C does not need SaskPower to deliver 10 megawatts of new load through the utility planning cycle because P2C generates its own power. The behind-the-meter generation framework eliminates the Crown utility lock: P2C does not need a deregulated market or a direct PPA pathway because it is its own power producer. The Belle Plaine site's gas pipeline access provides the fuel supply that the microgrid requires without dependence on SaskPower's generation mix. The sovereign colocation model addresses the sovereignty limitation at the infrastructure layer — the one layer where Canadian law can provide exclusive jurisdiction — while being honest about the layers it cannot reach.

P2C does not solve the interconnect limitations, the ecosystem void, or the categorical full-stack sovereignty limitation. No single project can. But P2C does not depend on any of them in the way that a conventional colocation entrant would. A SaskTel-hosted, grid-connected, carrier-dependent operator entering Saskatchewan encounters all nine limitations simultaneously. P2C encounters three: interconnect density, ecosystem, and full-stack sovereignty. The other six are eliminated or bypassed by the project's architecture. P2C can further address operational sovereignty at the infrastructure layer — the achievable middle ground identified in this assessment — by maintaining Canadian physical custody, Canadian-controlled access and logging, and exclusive Canadian jurisdiction over facility operations.

This is the structural observation that frames the P2C conversation. The question is not whether Saskatchewan has a functioning datacentre industry — it does not, at the scale the market requires. The question is whether P2C's architecture is correctly designed to operate in a province where the industry does not exist, by not depending on the infrastructure that an industry would provide.

15. The Thermal Architecture Question

Proconsul's work on Thermal Decoupling Architecture extends the logic one step further. If P2C already routes around Saskatchewan's power, utility, and capacity limitations through its own generation and infrastructure, TDA routes around the province's thermal management limitations by eliminating the requirement for facility-scale HVAC. This matters more than the capability narrative acknowledges. The cold climate advantage that anchors Saskatchewan's data centre positioning applies to air-cooled facilities at legacy densities. At 40 to 140 kilowatts per rack, the market has moved to liquid cooling, and cold ambient air provides marginal benefit for the infrastructure class that defines the current market. TDA eliminates the dependency on either climate or conventional cooling infrastructure, producing a compute facility that requires nothing from Saskatchewan except a weatherproof building, a gas pipeline connection, a network path, land, and access to water for liquid cooling systems. Grid capacity becomes irrelevant. Facility-scale HVAC infrastructure — which Saskatchewan has no industrial base to build at modern density — becomes irrelevant.

The limitation map establishes why this matters. Saskatchewan's advantages are real but narrow: land, low disaster risk, gas pipeline capacity, water availability (subject to licensing verification at specific sites), and Crown-level infrastructure sovereignty. Its disadvantages are structural: no grid capacity for new industrial load on a compatible timeline, no utility responsiveness, limited interconnection density, no ecosystem, no workforce pipeline, and no facility-scale thermal management industrial base. An architecture that depends only on the advantages and eliminates the disadvantages is not a marginal optimisation. It is the only class of architecture that can deploy sovereign compute infrastructure in this province on any timeline shorter than a decade.

That is the conversation ahead. Not whether Saskatchewan's datacentre industry is ready — it's not. But whether P2C, with the right thermal and power architecture, can build what the industry cannot provide.

END OF BRIEFING NOTE

Proconsul Strategic Architecture — Saskatchewan, Canada