

BEFORE THE BONNEVILLE POWER ADMINISTRATION

Comments of Google LLC on the BP/TC-27R Pre-Proceeding Workshop on Grid Access Transformation (GAT): RAPID Program and Transmission Open Season

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Submitted To: Bonneville Power Administration (techforum@bpa.gov)

1. Introduction and Statement of Interest

Google LLC ("Google") respectfully submits these informal regulatory comments in response to the Bonneville Power Administration's ("BPA") Pre-Proceeding Workshop held on October 19, 2026, regarding Grid Access Transformation's ("GAT") Rapid Access Products and Interconnection Delivery ("RAPID") initiative, Speed to Power Request for Interim Non-Firm Transmission ("SPRINT"), Paired Load and Integrated Dispatch ("PLAID"), and Transmission Open Season ("TOS") concepts.

Google recognizes that BPA faces unprecedented interconnection demand, with BPA's active Line and Load Interconnection ("LLI") queue standing at 47.4 GW, more than four times BPA's balancing authority peak load of 11.5 GW. Legacy serial interconnection processes are no longer adequate to process modern infrastructure deployment, and Google commends BPA's leadership for attempting to establish expedited pathways to power.

However, rapid administrative execution must not come at the expense of sound policy and rate design and process fairness. Google encourages BPA to continue to develop its many policy proposals so that Google can more fully evaluate those proposals when they are supported by more granular cost models, tariff redlines, and explanatory details, which should be part of the pre-rate case phase with an opportunity for meaningful stakeholder participation. Google submits these comments to provide technical guidance, highlight national market precedents, and partner with BPA to refine

these frameworks into a deliverable, durable, and non-discriminatory transmission architecture.

2. Procedural Difficulties and Request for Additional Technical Workshops

The current pre-proceeding schedule is compressed and creates procedural strain for regional stakeholders. On October 19, 2026, BPA released a 70-page slide deck outlining complex tariff overhauls, new non-firm rate schedules, incremental firm rate leanings, and an auction-based Transmission Open Season, while imposing a single-week public comment deadline. The brevity of this comment window, combined with the sometimes high-level nature of the underlying tariffs, cost allocation and rate formation and impact, and overall program structure renders it difficult to provide thorough comments, although in these comments Google aims to provide guidance and feedback to BPA and its staff and stakeholders.

BPA intends to publish its initial Federal Register Notice ("FRN") and formal Initial Proposal in December 2026, with formal Intervenor Direct Cases due in January 2027. Moving directly from broad conceptual slides to a formal proceeding in less than two months renders it difficult for stakeholders to evaluate the operational and financial impacts of these changes.

- **Request for Technical Workshops:** Google strongly urges BPA to schedule dedicated, deep-dive technical workshops in early December 2026—prior to publishing the FRN and locking in Direct Case positions—focused explicitly on program structure and implementation, draft tariff redlines, rate formulas, and study methodologies.
- **Need for Supporting Data:** BPA must publish the detailed financial assumptions, capacity credit formulas, and electrical screening models supporting SPRINT and PLAID so that market participants can perform rigorous due diligence.

3. Cost Allocation Principles: "Beneficiary-Pays" vs. Blanket Direct Assignment

BPA's proposed rate leanings rely heavily on a maximalist interpretation of the "Ratepayer Protection Pledge," proposing that all network upgrades, bay expansions,

and ongoing Operations & Maintenance ("O&M") triggered by large loads (>50 MW) be 100% Direct Assigned to the interconnecting customer. While Google fully agrees that large energy users must cover the direct cost of facilities dedicated to their exclusive use to shield existing ratepayers from cross-subsidization, BPA's blanket direct assignment model is economically flawed and creates severe market distortions.

The First-Mover Penalty and Free-Rider Inefficiency

Under BPA's proposed direct allocation structure, an initial data center developer that triggers and funds a major 500 kV substation expansion or system protection upgrade bears 100% of the capital expenditure. If that upgrade unlocks 1,000 MW of latent grid headroom, subsequent "late-comer" loads or generators connecting to the same node would absorb the newly created headroom without contributing to the underlying capital cost. BPA staff acknowledged during the October 19th workshop that late-comers would essentially receive this unlocked capacity for free.

This "first-mover penalty" creates a severe perverse incentive: developers are incentivized to delay project filings and wait for adjacent market participants to fund foundational grid infrastructure. Blanket direct assignment contradicts long-standing Federal Energy Regulatory Commission ("FERC") Order 1000 cost-allocation principles, which mandate that transmission costs must be allocated roughly commensurate with estimated system benefits.

Mandatory Cost-Sharing and Late-Comer Reimbursement Frameworks

BPA must revise its cost-allocation framework to incorporate equitable cost-sharing and late-comer reimbursement mechanisms:

1. **Late-Comer Repayment Mechanics:** If an initial developer funds a network upgrade that creates residual capacity, any subsequent load or generation interconnecting at that Point of Interconnection ("POI") within a 10-year window must pay a pro-rata share of the original capital cost, which BPA must refund to the initial funder.
2. **System-Wide Benefit Offsets:** Grid expansion projects that relieve legacy transmission congestion, enhance regional transfer capability (e.g., across Cross-Cascades flowgates), or improve bulk power reliability must be

broad-based and rolled into regional network rates rather than direct-assigned to a single interconnecting customer.

4. Standalone Long-Term Non-Firm / Interruptible Service Option

Under SPRINT and PLAID, BPA proposes offering Long-Term Non-Firm Point-to-Point ("PTP") service as an interim bridge, while explicitly requiring all participating customers to execute a Precedent Transmission Service Agreement ("PTSA") committing to take long-term firm transmission service under a future Transmission Open Season.

Google strongly opposes forcing all large loads into mandatory firm service commitments and continuous network expansion obligations. BPA must establish a permanent, standalone Long-Term Non-Firm / Interruptible Transmission Service option that allows large loads to remain on non-firm, parameterised interruptible service indefinitely without requiring a transition to firm service or forcing multi-million-dollar network upgrade commitments.

Strategic Benefits of Permanent Non-Firm Access

- **Grid Optimization over Overbuilding:** Some advanced compute workloads can be dynamically throttled, paused, or shifted geographically in response to grid stress. Allowing flexible loads to remain on interruptible service maximizes the utilization of existing transmission capacity without forcing BPA to overbuild grid infrastructure for peak hours, or requiring those loads to pay potentially unbounded costs to transition to firm service.
- **National Precedents:** Permanent non-firm and conditional demand frameworks have been successfully implemented across major U.S. grid footprints. BPA should align its tariff with established benchmarks, including SPP's Conditional High Impact Large Load Service ("CHILLS") framework.

5. Comprehensive Gap Analysis: Technical, Commercial, Rate, and Procedural Requirements

To ensure BP-27R and TC-27R result in a workable commercial tariff, BPA must provide explicit clarity on the technical, commercial, rate, and procedural gaps identified in the matrix below.

Topic Area	Identified Regulatory & Operational Gap	Google Recommended Solution & Tariff Asks
Electrical Proximity	Draft PLAID rules require generation to connect at the exact same substation fence line, or within a BPA-approved electrical proximity standard.	Define "electrical proximity" broadly to cover paired resources connected across adjacent sub-transmission circuits within the same BAA.
Net Curtailment Mechanics	Unclear whether curtailment directives apply to gross site load or net grid draw.	Evaluate compliance strictly via a Net Curtailment Obligation at the POI, allowing BESS/gen to offset load draw.
Telemetry & Automated Signals	No defined protocol or advance notification window for non-firm down-dispatch.	Establish automated telemetry sending dispatch signals 15–30 minutes prior to physical enforcement.
3rd-Party Engineering Studies	BPA hasn't finalized rules accepting 3rd-party engineering studies for PLAID.	Formally authorize certified 3rd-party engineering firms to execute Impact/Facilities studies under BPA oversight.
SPRINT NPV Scoring Formula	Clearing criteria rely on ambiguous "highest NPV of financial revenue stream".	Publish a transparent, mathematical NPV scoring algorithm incorporating clearing price, build speed, and flexibility.
Deposit True-Ups & Capital Credits	Upfront deposits (\$20k fee, \$150k SIS, \$500k FS) are labeled non-refundable.	Mandatory true-up of deposits to actual study costs; credit all paid deposits toward final Direct Assigned capital assets.

Topic Area	Identified Regulatory & Operational Gap	Google Recommended Solution & Tariff Asks
PTP-26 Interruption Billing	Section IV.D allows pro-rated credits for interrupted hours, but billing mechanics are unstated.	Implement automated monthly billing audits to ensure pro-rated credits under Section IV.D are credited transparently.
"Higher-of" Rate Test Formulas	Leanings propose a "higher-of" rate test between base and rolled-in rates, but lack modeling.	Publish quantitative rate models demonstrating how the "higher-of" test avoids stranded cost risk without overcharging.
Procedural Timelines	Aggressive timeline between Pre-Proceeding Workshop and December 2026 FRN.	Extend the procedural schedule and hold technical conferences in early December, 2026 on draft tariff redlines, in advance of the FRN.

6. Unlocking System Headroom via Virtual Power Plants (VPPs), DERs, and Demand Response

A critical omission in BPA's RAPID presentation is the total absence of demand-side flexibility, Virtual Power Plants ("VPPs"), Distributed Energy Resources ("DERs"), and Demand Response ("DR") integration. Transmission providers do not need to solve a 47.4 GW queue bottleneck purely through physical steel-in-the-ground grid expansion.

Demand Flexibility as a Cost-Effective Capacity Proxy

Integrating flexible customer demand reduces system peak loads, eke out latent capacity from existing substations, and economically bridges the multi-year gap required to permit and construct new high-voltage transmission lines. Recent grid optimization studies demonstrate that deploying targeted demand-side management and DER portfolios can unlock hundreds of megawatts of seasonal peak reduction

potential at a fraction of the cost of traditional gas peaker additions or major wire builds.

Ensuring Tariff Changes Facilitate Transmission Benefits from Demand Response and Behind-the-Meter Storage

Demand response and behind-the-meter storage, including co-locating DERs or participating in a VPP program, can offer significant transmission benefits. Tariff changes adopted as part of this process should either facilitate, or at least not foreclose, recognition of transmission benefits from these resources.

- **Formal Flexibility Roadmap:** BPA should commit to establishing a formal Demand Flexibility Product and VPP Accreditation Roadmap within the BP-27R / TC-27R proceeding or via another process to accredit flexible demand as a formal resource adequacy and transmission-relief tool.

7. Operations & Maintenance (O&M) Allocation and Safeguards Against Double Recovery

BPA's rate proposal specifies that all O&M expenses associated with Direct Assigned interconnection assets and large-load network upgrades will be collected directly from the interconnecting customer, evaluated either via an upfront Net Present Value ("NPV") lump sum payment or an ongoing annual obligation.

While Google accepts the principle that customers should cover the incremental O&M cost of facilities dedicated to their exclusive service, BPA's proposal lacks necessary accounting definitions and creates a severe risk of financial double recovery.

Accounting Safeguards Against Double Recovery

1. **Scope of Direct Assigned O&M:** BPA must explicitly define what items are included in "Direct Assigned O&M". Direct O&M charges must be strictly limited to routine physical maintenance, equipment inspections, and direct repair costs for dedicated substation bays and customer-sited radial lines. General administrative expenses, regional dispatch overhead, and system-wide reliability costs must be excluded.

2. **Explicit Tariff Offset:** Standard wholesale Point-to-Point ("PTP") and Network Integration Transmission Service ("NITS") tariff rates already incorporate embedded system-wide O&M revenue requirements. If a large load customer pays an ongoing PTP rate (\$2.043/kW-month under PTP-26) *and* is charged a separate upfront NPV lump sum or rate adder for asset-specific O&M, BPA will double-recover O&M expenses for the same physical assets.
3. **Mandatory Credit Mechanism:** the GRSPs in BP-27R must include an explicit crediting mechanism ensuring that any direct-assigned O&M collected via upfront NPV or annual adders is fully credited against the customer's monthly wholesale transmission bill to eliminate double recovery.

8. Conclusion and Summary of Regulatory Asks

Google appreciates BPA's vision and proactive engagement in addressing the Pacific Northwest transmission queue crisis. By refining proposal evaluation standards, replacing blanket direct assignment with equitable "beneficiary-pays" cost sharing, establishing a permanent non-firm transmission option, accrediting VPPs and demand response, and enforcing strict O&M accounting safeguards, BPA can establish a sustainable, gold-standard model for modern grid access in North America.

Summary of Google's Specific Asks:

1. **Procedural Relief:** Schedule dedicated technical workshops in December 2026 on draft tariff redlines and rate formulas before locking in Direct Case deadlines.
2. **Cost Allocation Equity:** Reject blanket direct assignment of network upgrades; implement a 10-year late-comer cost-recovery framework to prevent free-riding.
3. **Permanent Non-Firm Option:** Establish a permanent, standalone Long-Term Non-Firm / Interruptible PTP Transmission Service option exempt from firm network buildout costs.
4. **Demand-Side Integration:** Ensure that tariff changes facilitate, or do not disincentivize, VPP and Demand Response for participating PUDs and end-users.
5. **O&M Accounting Protections:** Define O&M scope tightly and insert explicit GRSP crediting mechanism to prevent double recovery across PTP/NITS rate schedules.

Google remains committed to working collaboratively with BPA staff, regional utilities, and industry stakeholders throughout the upcoming BP-27R and TC-27R proceedings.

Respectfully submitted,

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