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# NewSun<sup>TM</sup> ENERGY

**NewSun Energy Presentation**

*BPA TC-25 Customer-Led Workshop*

Interconnection Reform

**Strawman Proposal + Feedback to Staff's Initial Leanings**

May 18, 2023 Workshop



# Agenda

- I) Intro, Context, Punchline Summary
- II) Key Notes & Concerns
  - Additional Background Context
- III) Recommendations & Feedback
  - BPA Initial Staff Leaning – Feedback
  - Additional Reforms & Recommendations
  - Strawman Proposal
- Summary: Key Takeaways & Recommendations

*See also NewSun's April 21<sup>st</sup>  
BPA TC-25 Customer Presentation  
with additional comments, context,  
On market dynamics, BPA role,  
and interconnection issues, lessons  
learned, and principles for GI Reform*




## Section I) Intro

- Introduction
- NewSun Background/Approach
- Recap Background Notes

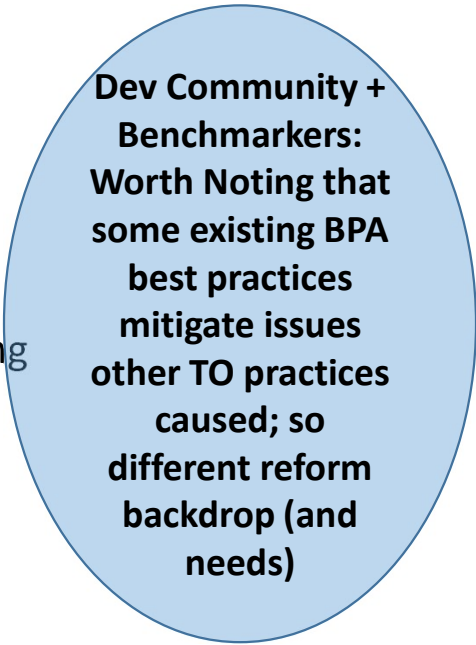
\*See also: Prior NewSun TC-25 Presentation

# NewSun Experience / Philosophy

- Extensive BPA IX + TX study process experience
  - Round-Peg Approach to BPA realities
  - Pro-Market, Pro-Investability, Pro-Good-Precedent & Fairness
  - Pragmatists focused on Climate Outcomes
  - Low Hanging Fruit + Creative Practical Solutions
  - Ideas informed from practical experience, conversations, observations with BPA process and team
  - Also informed by issues in other GI 'reforms' – not-as-advertised, etc
- 

# Punchline: Strawman Summary

- **Hybrid Approach: “Alt 3B”**
  - Seniority Based, 3-Phase Cluster Based – after thorough, fair transition
  - Mesh Best Current Practices + Cluster Benefits
  - Low Hanging Fruit + Max Benefits + Min Harm
  - Ensure TSEP+TSA compatibility; minimize new bureaucracy/admin
  - Minimize Market Disruption
  - Neutral Platform, w/o Chutes-and-Ladder, FS/FS, or Commercial Readiness
  - Min/no change for current ICs + ensure all get studies, especially long-waiting
- **Couple with Parallel Efforts, Commitments, Reforms, Staffing**
- **Take Time to Do It Right** – Honor Current-OATT ICs, Max Results
- **Supplement w/ Creative Solutions**
  - Triaging Clusters (incl. Transition)
  - Catch-Up Effort + TSEP Pause + Alternating TSEP + GI Cluster Years
  - Accelerated “Known Needed”

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**Dev Community +  
Benchmarks:  
Worth Noting that  
some existing BPA  
best practices  
mitigate issues  
other TO practices  
caused; so  
different reform  
backdrop (and  
needs)**

# Recap) Why BPA (+PNW) is Different

- **BPA as the Backbone + Super Highway of the PNW Market**
- **Radically Diverse Stakeholders, Market Participants** -- See Next Slide!
  - Across many, many factors and cross-sections
  - All Doing business, simultaneously in every which direction and way
  - All/Mixes of: Contractual Obligations + Tariff Reliances + BPA service reliances (and limits)
- **Long-Term Firm Transmission Agreements** – And Lots Of Them. Liabilities.
- **TO with No Rate-Basing Bias.** Not trying to beat its TCs/ICs in Market
- **Public Power.** Preferences, Obligations, History, Assets, Finances, ...
- **Various Federal Entity Constraints**
- **Its Own History + Tariffs**
- **FERC Regulation... Well, No, Not Really.** Independent, but...

# Recap) BPA Stakeholder Mega-Diversity

## So Many Types, So Many Ways to Slice Us...

- Publics + IOU + ESS; single-state vs multi-state
- Power Trading + (L/T) Power Supply
- Gen-Owning + Non-Gen-Owning
- Slices + Dispatchable Assets + Block + Load-Following + Hybrids... NT/non-NT, ARM/PRM
- Developers + Operators; Sellers + Buyers + Both
- Regulated + Non-Regulated
- Big Folks + Small Folks
- Supply, Trading & PPAs: Real Time + Long-Term + 5-year
- TOs + non-TOs; TSA-holders/Non-; TSEP TSRs vs non-
- LSE Load Growth + Non-Load Growth + Wide Range
- 100% Self-Procuring + 100% 3<sup>rd</sup> Party Dependent + Mixed Sources (BPA + non-BPA);
  - Self: In-House + Out of House

## Meanwhile...

### Supply Pressures, including Regulatory + Market Demand Overlays++:

- WUTC + CETA
- OPUC + HB 2021 + RPS
- New Load Growth
  - Smaller Publics
  - Mega-Industrials
- Cities, LSEs, TCs, IOUs, NT, ...
- EIM
- Interties + CA demand
- Gen Retirements
- PSPS
- ...

# Section II) Key Context & Concerns



## **Key Concerns, Context, Notes:**

- Following slides summarize a variety of key concerns and considerations as relates BPA approach to GI reform.



# Key Concerns & Context (1)

- **Avoiding disruption to current market supply is the most important.** Market needs current GIs to get quality studies, avoid market. Current GIRs' success more important than clearing queue.
- **BPA's reform efforts should be coupled with a strong commitment and program to expend staffing** supporting GI, TSEP, and transmission planning efforts. Should be part of TC-25.
- **Public Power's access to market new generation supply is vulnerable to privileges that certain policies might give others (IOUs).** Similar exposures to developers & competition.
- **BPA should avoid creating new administrative burdens from new readiness criteria**
  - Complex: Reviewing PPAs, term sheets, LOIs, IRP and RFP shortlists.
  - Current BPA criteria are simple, well understood.
  - Many proposed in BPA's initial leaning could be complex and contentious, with commensurate administrative burdens and backfeeds into tariff timelines that are untenable, infeasible, or lead to disputes or undermine their original purpose, especially if they result in unnecessary or unplanned withdrawals (and then trigger more delays and restudies).

## Key Concerns & Context (2)

- **Contributing factors to current queue volume are not going away.** These include massive energy needs and clean power regulatory requirements.
- **Clearing the queue out, for its own sake, is undesirable and ill-advised.** Particularly for it only to refill back up, likely with less clarity on cost assignment, more mega-upgrade dependence.
- **Err in favor of “no harm” approach.**
- **Not All GI Reform has been “As Advertised”:** Lessons Learned, Avoid Mistakes
- **Reasonable, practical timelines to accomplish commercial tasks.**
- **The point is productive useful outcomes to participants,** not removal of queue positions.
- **At some point in the current TSEP and GI queues, the 500-KV and 10-15 year NEPA for new transmission lines begins.** Everything after is a long way away, irrespective.
- **Projects compete in the market primarily on the quality of their interconnection and transmission. BPA should focus on delivering those results.** Then let the projects compete and participate in the market, as they do today.

## Key Concerns & Context (3)

- **In undersupplied market, with amplified demand, all project with viable interconnections will likely be built.** We are in a new era, due to regulatory demands and load growth. It is very unlikely that viable projects will sit around in the queue (so that shouldn't be assumed, nor over-worried about vs harm risk). Today, projects are waiting on interconnections, not the other way around.
- **Certain approaches could create TC-25 rate case (and/or other) litigation risks for BPA,** relative to potential harms affecting BPA's various affected customers. BPA should avoid that risk.
  - Long-term firm take-or-pay contracts/TSAs: Nexus to GIRs
  - TSEP PEA and ESA fundings, often with TSRs explicitly or generally linked to LGIRs.
  - LSEs might be mid-negotiation with GI developers.
  - Developers may have spent thousands or millions on project development.
  - All relying on the current OATT.
  - BPA customers could suffer substantial financial harm.
  - If BPA creates exposures or harms to those parties, the TC-25 rate case's likelihood of litigation (or litigation through other venues) could create risk, costs, and other undesirable outcomes. These are avoidable risks.

# Factors Not Fully Considered by BPA



- Older/Senior Queue Positions – Benefits to Keep; Harms to Remove; non-Beneficial
- Maturity of Surrounding Development
- New World Market Order: DEMAND... So much Demand =
- Volume of Requests Not Going Away
- Cause of Delays: Isn't GI driven, so much as bandwidth + volume driven
- Re-Study Removal Recirculation Issue/Dynamics
- Asymmetric Benefits vs Harm for IOUs vs Public Power w.r.t. Readiness Criteria
- Differences from "PAC" model and RTO models
- Not-As-Advertised Dynamics
- Compression can amplify (not cure) problems
- Transmission Rights Holders
- TSEP Interfaces
- TSEP Synergies
- Litigation Risk – Unique, re: Harms
- Natural Culling of Queue

# Senior GIRs – Inherent Mkt Value



## Issues w/ Removal

- Unique and Higher Viability GIRs:
  - Best siting, more advance permitting
  - Senior Access to Existing Grid Capacity
- Doesn't unlock land+dev positions –
- But sends to back of interconnection queue
- Fragments GIRs from TSRs/TSAs (and L/T redirects very hard now)
- Withdrawal/removal *increases* re-studies for others
  - Amplifying ricochet effects, and problem we seek to avoid
- Later cluster groups = worse outcomes
  - Combo'd w/ more positions, post-mega clusters, post-500 KV upgrades
  - Ergo, lower viability after removal
- Disruptions of Commercial Transactions

# Seniority-Based Queue: Benefits



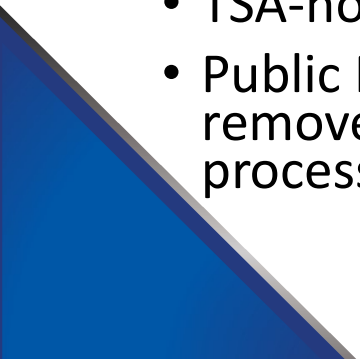
- **Clarity for Cost Allocation + GI Decision Making**
  - Who benefits from available existing capacity
  - Who carries which upgrades & costs
  - How costs are allocated
- **Mitigates No-Viable-Solutions Issues** in FR/FS with “No-Seniority” Cluster OATTs
- **Each IC is not dependent on co-cluster participants decisions**
  - Unknowability Issues
  - Your costs depend on the other guy’s costs. *How to decide??*
  - Particularly problematic when major upgrades triggered, spread across all sub-cluster participants: No one should proceed.
  - Coupled w/ onerous deposits, short timeline = unfair, impractical, undermines goals.

# Queue Seniority: Material Benefits



- Everyone in the current queue filed into a *seniority based system*.
  - -- including those at the back of the 140 GW line
- Therefore there is no *un*-fairness to any GIR to keep seniority basis: everyone knew that.
- TSEP Consistency: Seniority-based allocation of existing capacity, and cost-sharing of incremental network upgrades past break-points, is both how current GI studies and TSEP work.
- Clarity benefits: Current BPA GI and TSEP studies provide clarity, relative to increment impacts of customers (or tiered groups of customers), and ability to use existing capacity, relative to
- Scrambling cost clarity, by removing seniority, and forcing senior positions to share costs with junior co-cluster participants is both unfair and harmful to both the overall outcomes (now no one has clarity on who benefits from existing capacity).
- Avoids lookback issues. Also avoids harm if forced to share backwards-in-queue.

# Examples of Unintended Consequences

- Punitive Provisions force unnecessary & premature withdrawals
    - Amplifies Re-Studies while harming market supply access
  - Partially Developed Projects losing LGIRs makes things worse
    - Land (at good locations) Still Tied Up
  - Disruptions on commercial negotiations in progress
    - Not all IOU LSE deals; not all PUC/UTC regulated processes
  - Withdrawal penalties & bigger non-refundable can cause people to stay in, see how it goes, delay penalties
  - TSA-holder losing LGIR could affect ability to pay transmission service
  - Public Power w/ Industrial Load – could lose revenue opportunity if GIR removed before deal consummated; affects public power finances, LLIR process (and lost work there), affects transmission planning to support, etc
- 
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## Section III) Recommendations & Feedback



- A) General Feedback
- B) Reform Specific Feedback:
- C) Strawman Summary

# A) Staff Initial Leanings, General



- A) General Feedback
  1. Support Areas
  2. Core Concerns
  3. Disagree/Oppose
  4. Miscellaneous General

## A-1) Areas of Support for Init Leanings

- **Transition to Cluster-based format of studies**, for batch-process type benefits to staff bandwidth;
- **Keeping 3-Phase Study Process Format:** Feasibility, SIS, then Facilities.
- **Limiting increases in costs to GIs:** Keep diversity in market
- **Exclusion of withdrawal penalty concepts**, which we believe create counter-incentives;
- **Preserving ICs' downsize rights:** The ability to downsize to avoid upgrades helps ICs/Mkt Self-Solve Problems
- [Study Cost Allocation for Post-Transition GIs]
- **No Informational Studies:** Not useful, especially without real queue seniority in context, waste of precious BPA bandwidth. Purpose better served in BPA's high quality scoping and study results meetings, which should be preserved.
- **Targeted outsourcing of certain study and engineering work**, but in a way that recognizes that BPA's own engineering team brings unique value that 3rd party firms will not. We'd prefer BPA staff with long-term system knowledge be involved as much as possible. Long-term, employees are cheaper than consultancy costs (with required BPA overhead add-ons).

## A-2) Select Core Concerns

- TSEP compatibility.
- Interactions being properly considered across various processes (TSRs, LLIRs, NT, PEAs, TxPlan)
- Litigation risk, re: harms to parties, eg Public Power access to supply and/or deal disruption.
- Potential advantages to IOU LSEs and larger balance sheet IPPs/developers; market needs healthy diversity.
- Failure to leave time and space for TSEP or Transmission Planning upgrades to be identified or drawn into those processes, and out of the GI process .
- Ensuring all current GIs get fully studied.
- Propulsion of current GIs out of the queue (undesirable) vs. providing time for projects to fully advance and mature, as currently allowed under OATT.
  - Assets whether generation or interconnection or transmission take time to develop.
  - Upstream delay harms the pace we need to develop to meet todays challenges.

## Select Core Concerns (2)

- Bureaucratic logjams of readiness criteria review should be avoided, unnecessary.
- Failure to pause TSEP process during transition may unnecessarily drag out, compress, or otherwise adversely affect the realization of maximum quality results from current queue, projects, and for ICs that invested in current results. As well as diminish BPA staff resources to properly advance upgrades and system needs already identified from prior TSEP, or which might serve LLIRs and public power needs to advance related interconnection and system upgrade projects.
- LGIRs that have been waiting for years (or really any time in excess of BPA tariff study timelines) for initial studies should not face abrupt removal for lacking commercial clarity.
- Simplified and standardized models for GIRs' initial studies. This is a practical approach that will reduce BPA review burdens validating models for which many specifics are not critically relevant for feasibility (phase I) studies.

## A-3) Disagree/Oppose

- **FR/FS:** We oppose having a "first ready, first served" component to the cluster process. There should not be chutes-and-ladders systems. "Cluster" benefits do not require "FR/FS".
- **Tie-Breaker Concept:** Not needed in a first-come, first-served, serial queue seniority-based structure. Additionally, chutes-and-ladders can completely kill projects that may have been relying on such capacity in negotiations and transactions, including with public LSEs. Instead, let queue seniority sort out which GIs have the best interconnections, and the market can transact with those parties. Additionally, BPA project management staff bandwidth is also highly constrained.
- **Materially adverse changes to current ICs general terms and conditions.**
- **Inclusion of readiness criteria.** Each and all are problematic. They create unnecessary distortions and likely market disruptions, and have risks of exacerbating inequities, unfairness, and (especially paired with impracticable short timelines to demonstrate following receipt of studies) are likely to result in massive restudy issues and the unnecessary death of projects that should be given time to transact in the market.

## Disagree/Oppose (2)

- **Shortness of Response Times** if readiness criteria included, re: practical infeasibility.
- **Exclusion of consideration of parties transmission rights in consideration of viability**, especially to the extent any readiness criteria are applied. This is in conflict with current BPA business practices which recognize transmission rights critical contribution to viability.
- **Major Financial Burdens before clarity on upgrades that TSEP will carry, or which BPA will fund. Including opposing the 20% N/U posting.**
  - ICs should not be asked to post major sums of monies related to upgrades unlikely to be carried through the GI process.
  - If a posting is needed then, it should look more like a TSEP PEA type approach.

## A-4) Miscellaneous Add'l Recommendations

- **No Readiness Criteria.** Except Site Control at SIS phase (but this is per current tariff process, not a change).
- **Customer engagement, Year-Round.**
  - Spread out the work load on BPA staff, and avoid mega crunches which neither serve staff, the outcomes intended, nor GIs, due to the compression that will occur from so many ICs in a short window.
  - Less compression also allows GIs to have time to make voluntary decisions (as is allowed now) to downsize or adapt based on scoping meeting input.
  - This will result in better size, better informed requests, and better overall viability and study process function (and preserve a key area of excellence with BPA's current practices).
- **Cure Periods:** Depending on final format, should be adapted to be practicable given the nature (and complexity) of the items that may apply. For example, a cure period on a PPA rejected by BPA would involve complex interactions with 3rd parties.
- **Ensure Appropriate Review Periods**
- **Voluntary Cross Customer Discussion:** Consider extending and adding voluntary, *BPA-facilitated multi-customer discussion*. Cluster groups discussing amongst themselves the ability to downsize, adapt, and avoid certain major upgrades would be beneficial to all.



## Misc. (con't)

- **Out-of-House Study Timing:** We have concerns that outsource studies, given contracting and 3rd parties, may not in practice meet required timelines. Loss of BPA expertise/benefits re: system knowledge.
- **PEA Type Option:** BPA might consider something more like TSEP PEA approach after study phases, as relates specific major upgrades.
- **Major Upgrades & Cost Allocations should account for TSEP & BPA Carried Upgrades:**
  - ICs should not be posting amounts for upgrades actually or likely occurring elsewhere.
  - Cluster timing should account for these determinations, and TSEP efforts should ensure examination and determination of same occurs well-timed for GI cluster.
  - See comments below about alternating GI and TSEP cluster years.

### Deposits & Fees

Current GIs: Should not change.

Transition group should not materially change.

## **B) Reforms, Specific Feedback**



- **B) Reforms, Specific Feedback:**

1. Itemized Feedback on BPA Initial Staff Leanings
2. Additional Recommendations
3. Parallel Reforms & Actions
4. Miscellaneous / Additional

# B-1) Specific Feedback on Initial Staff Leanings



## Staff Leanings:

### BPA 4/26/23 Slides List

- i. **Cluster Study Method/Format** (FR/FS vs variations)
  - a) Recommended Fixes & Additions = "Alt 3B"
  - b) Schedule Feedback
  - c) Tie-Breaker
- ii. **Commercial Readiness Requirements**
  - a) Study Deposits
  - b) Site Control
  - c) Commercial
- iii. **Study Financials**
- iv. **Network Costs**
- v. **Technical Study Requirements**
- vi. **Affected Systems**
- vii. **Transition Process**

## (i)(a) Cluster Format, Method

- **BPA evaluating FR/FS and variations** (FERC vs PAC vs RTOs vs Modifications and Alternatives). Alternatives 1, 2, 3.
- **We Recommend: “Alt 3B”: Modified BPA Seniority-Based Cluster**
  - Bring best of (i) current BPA + (ii) TSEP-compatible + (iii) Cluster/Group Benefits
  - Coupled w/ Staffing Commitments++
- **Support: Cluster Format Approach** (via appropriate transition)
  - Batch Processing Benefits = Staff/Bandwidth Leverage
  - Sub-Grid & Geo-Sub-Clustered Areas
    - Note: BPA already does this – *and thus doesn’t have same problems of other IOUs in Re-Study Issues*
- **Oppose “FR/FS”:**
  - No Chutes-and-Ladders
  - Oppose commercial readiness criteria; all have issues & unfairness, cause distortions
  - Roots in IOU LSE queue clearing biases, disparagement of market/IPP
  - *Don’t need FR/FS to capture benefits of cluster-based study approach*

## i) Alt 3 Approach: Mixed Support/Opp

- **Support BPA *Select* “Alt 3A” Leanings (More Details):**
  - **3-Phases:** Phase I + II + Facility (aka 2-Phase Cluster + Facilities)
  - **Good to have actual study results** – based on *actual* queue projects
    - No Info Study; waste of time
  - **No Model Validation at Phase I:** Agree, good efficiencies, practical
  - **General study & cost-estimate goals, approach = good**
- **Oppose *Select* Alt 3B BPA Leanings (More Details)**
  - Oppose Tie-Breaker Concept
  - Oppose *Commercial* Readiness Criteria

## i) Recommended Features

- **Recommend Process Have All the Following:**
  - **3-Phase/3-Step Study process:** Feasibility + SIS + Facilities
  - **Cluster Based:** Groups of GIRs by Sub-Grid Areas
  - **Seniority Based treatment** of priority access to capacity + cost sharing
  - **TSEP-like / Current GI-like** sharing & tiering of successive upgrades
  - **Non-Punitive**
- **Implemented after an appropriate transition process,** respectful of current GIs OATT basis
- **Transition:**
  - Keep current GIs ~neutral to material change, harm
  - Catch-Up Efforts, maximize fully studied under current OATT
  - Triaged Transition Cluster Group, after applicable breakpoints

## i) Recommended Mods: “Alt 3B”



### • **Additional Mods Recommended – To Create “Alt 3B”:**

- **Year-Round Queue Open** – till closing date (like TSEP)
- **Year-Round Scoping Meetings:** Spread work around; time for IC adaptations, withdrawals.
- **Downsizing permitted (encouraged) through end of Customer Engagement**
- **Alternating TSEP & GI Cluster Years** (more below) for synergies + bandwidth
- **Triaging of Sub/Clusters, re: Natural Breakpoints\*** for more solvable models. Including Transition Sub/Clusters
- **Time/Space for TSEP + Transmission Planning N/Us\*** including re: cost responsibility and allocation – esp. where not currently usually in GI process
- **Multi-Pass Downsizing Opps @ End of Phases\*:** Identify where mega-upgrades triggered, facility customers self-solving through voluntary downsize

\*Additional Info Below

## (i)(b) Cluster Process: *Schedule* Feedback

- Generally good, but... **Recommend:**
  - Longer Pre/Transition Process (per above)
    - Will take a while. Worth it.
  - Clarify “Customer Engagement” Scope – esp. if adopting our other recommendations (year-round open window & scoping meetings)
    - Consider including Pre-Phase-I downsize discussion, re: group scoping, opp to avoid mega upgrades
  - Validation Processes will need longer cures if Commercial Readiness included (don’t!)
    - Compliance review and cures likely messy and complicated if PPAs, term sheets, etc
    - Be realistic about staffing, disputes, effects on timelines, etc
    - Shouldn’t have tariff-removals if log-jams in review of commercial (or other) readiness
  - FAC + Enviro Study + Etc: Generally assuming [same as current] (good)
- **CHANGE: Time Stamp is Year-Round, not just during limited window**
  - Seniority Preserved, for clarity benefits on cost and capacity priority



## (i)(c) Tie-Breaker Concept (Oppose)

- Not RTO – not just “who is ready” for LMP etc
- Current post-Facilities, LGIA, and TSEP Processes handle this
- ‘Fixing’ a non-broken part
- BPA isn’t [everywhere else, RTOs, PAC, etc]: PTP dominant system
- Goes away w/ elimination of FR/FS overlay & commercial readiness criteria  
-> First Come, First Served is Okay
- Practically speaking...
  - Today generally waiting for BPA to get to this phase (not waiting on ICs)
  - Conflicts on Project Management bandwidth
  - Unfairness issues
  - Damages relative to LDs
  - Multiple Project Manager Pathways (staffing)

# Tie-Breaker Issues (Oppose) (Cont)

- Ready-when-we're-ready: Both BPA and ICs side
  - Augment BPA staffing
- Mega-Market Demand will mitigate likelihood & volume of queue positions
  - Though its okay if not every GIR energizes immediately)
- Priority should be: **Making sure BPA ready to execute when ICs are... (Staffing, SCM, etc)**
- **Instead:** Revisit GIA ice options, max length + highlight BPA ability for junior queue positions to move forward
- Cost & Mega-Upgrade Sharing
  - Most major upgrades handled in TSEP. Which handles cost sharing.
  - Shouldn't be out of sync w/ TSEP – nor should existing ICs risk being booted from queue when have been relying on current OATTs for *both* GI and TSEP

# Tie-Breaker + Commercial Readiness: More Problems



## Consider:

- Transmission Contracts: \$\$\$ liabilities, often GIR nexus
- PPA Security Postings
  - Complexities with \$ at Risk
  - PPAs, transactions, diversity of parties – timing of public/non-public
  - RFP Bids, messiness
  - Non-Public Transactions
  - Diversity of Off-taker Criteria, Terms, etc
- BPA Project Management
  - Precious Resource too!
- **Should not have PPA security (\$\$MMs) default risk because someone's else's project races in front of yours – scoops capacity or BPA PM availability. Ditto on Load LSE support, issues.**

# Mega-Upgrade Cost Share ALTERNATIVE:

## **PEAs + TSEP + Recursive Downsizes**

- First: Must account for TSEP OATT, Approach – Be Compatible
- Second: If still must address in GI Process:
  - Identify/ensure TSEP compatibility
  - Apply tiered incremental upgrades cost-sharing approach
  - Differentiate treatment of current GIs vs. post-Cluster GIRs
  - Add multi-pass, recurse downsizing + upsized security approach
  - Consider PEAs/ESAs like TSEP
  - PEA deposits are real skin – burned study deposits – for common beneficial design work – junior positions benefit from design of commonly needed mega-upgrades
  - Unlock “Known Needed” Upgrades – Detach from TSEP & GI Processes, Accelerate
  - Separate CapEx Phase from Design/Engineering/Plan Phase

## i) Process, Add'l Notes, Supporting Actions

- Generally the “back of the GI process” that exists today, isn’t the problem. Rather, it’s the need to improve throughput on the front end that is the bigger issue and opportunity for reform, efficiency gains.
- BPA staffing / bandwidth effort should anticipate coming “back of the process” needs (in addition to earlier study engineers):
  - Project Managers
  - Transmission Planning engineers
  - SCM
  - Contracts & process
  - Synergies with Load

## (ii)(a) Readiness – Site Control



- **Site Control:**

- Don't change for Pre/Transition Group
- Partly supportive, but...
- Struggling to see how this works for post-500KV projects
  - Site control for 15 years from now?
- Math:
  - Should only need to cover 50% of acres. Avoid rigidity (ie. PAC's already outdated acres/MW)
  - Oppose Gen-Tie Criteria
  - Preserve basic flex for developers to solve problems
- Generally, not a new policy, just SIS phase criteria; keep current practices
- Don't support removing deposit-in-lieu for Phase I; useful



## (ii)(b) Readiness – Deposits

- **Deposits:**

- Don't change for Pre/Transition Group
- Generally Okay for Post-Transition
- Appreciate and support BPA keeping these #s reasonable for Post-Transition
  
- What about SGIP?
- Clarify that credits can flow forward from unused study deposits

## (ii)(c) Readiness– Commercial



- **Commercial Readiness**

- Generally oppose
- All problematic, create distortions, and/or favoritism
- Distortions favor IOU LSEs and Mega-Balance Sheet Players
- Chute-and-Ladders
- Issues of Favoring Back-of-Line
- If any, must have all... to avoid unfairness & distortions but then pointless
- Bureaucratically & administratively intensive to little avail
  
- *Practically speaking, the queue is 'full' before through transition group...*



# More Issues on Commercial Readiness

- **% of N/U \$\$ Problematic, Fairness + Timing Issues:**
- **BPA Proposals Fail to Consider:**
  - **TSEP Compatibility Issues**
    - Timing of of TSEP N/U
  - LTF PTP Transmission Rights
    - GIR nexus + Liabilities
  - Load LSE Network Gen Resources
  - TSRs pending in TSEP process
    - PEA + ESA fundings
    - BPA continuous LTF Pending Review for Offers
  - Should have credit/benefit if funding/-ed PEAs, etc
  - Other indicators
    - Permitting
  - Other Burdens of ICs
    - Paying for site control... for 3, 5, 7, 10, 15 years... while BPA gets through NEPA
- **Financial Harm to ICs/TCs based on above**

**Would GI be forced to post 20% of \$B N/U that is separately being handled in TSEP or other transmission planning? Or will be handled there “tomorrow”? Then lose GIR? What if signed TSA? Or funded PEA for TSA for X Years, then loses GIR?**



# Commercial Readiness

**If have these:** (despite recommendations)

- Need to incorporate BPA current biz practices on transmission rights benefits
- Should err in favor of any/all potential, to avoid unfairness
- Should auto-qualify if:
  - beneficial transmission positions or
  - LTF PTP
  - material funding of obligations in TSEP (PEAs)

## iii) Study Financials

- **3. Study Financials (Cost Allocations)**
  - Not a strong view here;
  - favor 90/10 mix per capita + per MW

## iv) Network Costs & Allocations


### **Network Costs**

- Recommend/Support Alt 1, *modified* for:
- Seniority, with Tiered Sharing by GI MWs.
- Similar to Current GI and TSEP, with Granularity
  - See alternating GI & TSEP Cluster year benefits
- Use/lever BPA's current GI studies with 'breakpoints' by MW

### **• Shared Network Upgrades**

- Generally support, but
- How dealing with N/Us picked up via TSEP, Transmission Planning, etc?
- Avoid harmful lookbacks, but should be able to pick-up benefits, like current BPA processes where upgrades (for common benefit) often pulled onto BPA balance sheet (like Shultz-Wautoma Cap Banks)
- TSEP interactions?

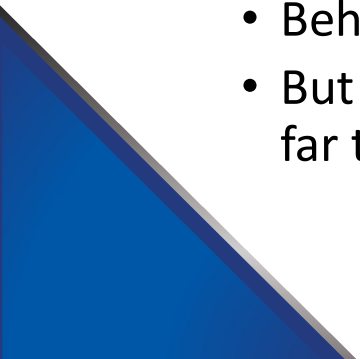
# v) Technical Study Requirements

- Support Staff Leaning:
    - Heat Map
    - Seniority Based Queue
    - No Info Studies
  - Supporting “3B” Mods:
    - Cluster window open year round (like TSEP)
    - Scoping meetings year round
    - Time Stamps & Seniority
- 

## vi) Affected Systems

- Support Staff Leaning
  - Status Quo
- Additional Notes:
  - Commercial Readiness problems highlighted here
  - Problematic to have affected systems exposure but have to post mega-\$\$\$ (eg 20% N/U costs) when long-term clarity to Affected Systems (and other long-lead uncertainty, like NEPA) is unknowable.
  - Known issue of long unknowns on other TO timing, responsiveness
    - Will be worse w/ Intertie overflows into CA utilities/TOs/etc

## 7. Transition Process

- Take time to study current GIs fully and fairly based on current OATT
  - Longer time frames if needed – better for market
  - **#1: Everyone Gets Studied – All the Way Through**
    - *Preserve & Protect Current Queue Positions' existing primary OATT terms & viability*
  - **Catch-Up Effort + TSEP Pause Year** (see below)
  - **Find transition point to switch to a Transition Cluster**
    - Behind major upgrades
    - But after anyone waiting for BPA studies (“Delay Notice”) can get at least as far through process as should have
- 
- A blue triangle graphic in the bottom-left corner of the slide.

# Triaged Cluster – Triage Concept

- Issue:
  - Mega-Clusters cause worse outcomes:
    - Too Many MW
    - “Unsolvable Model” type problems
    - Having “everyone” in a single pass ~ensures mega-upgrades
    - Scenarios in which “everyone” gets non-viable cost outcomes
    - Exacerbates withdrawal likelihood – and restudy likelihood
  - I.e. Likely fails to facilitate the intended, desired outcomes:
    - Maximally viable, useful, usable, actionable study results
    - Viable queue positions = projects = market gen supply
    - Reductions in Re-Studies, Reductions in Withdrawals



# Triaged Cluster

- **Triaged Transition Approach: First Triage/Cut: Serial till Clusters**
  - Cut 1: Serial Transition Group vs Clustered Transition Group
  - Cut 2: Triaged Remainder to Study-by-Sub-Clusters, till all done
- **Find Breakpoints**
  - Mix of Time Stamps and Study Status
- **Triaged Transition or Regular Clusters:**
  - Can break up existing queue (“triage”) into “solvable” groups
  - Transition Cluster A,
    - then B, then C
    - with geo-sub-clusters
  - BPA can evaluate natural breakpoints, in queue-time and/or line/grid capacities
  - Work through all in sequence batches
  - Avoids the unsolvable
- **Sub-Clusters:** Geographic & Time-Stamped
- **Multi-Pass Downsize Opportunities:** Allow customers to downsize multiple times to avoid mega-upgrades
- **Voluntary Cross Customer Discussion:** Voluntary, *BPA-facilitated multi-customer discussion*. Facilitate ability to downsize, adapt, and avoid certain major upgrades would be beneficial to all.
- **OPTION:** IC Ability to Drop Back to Next Transition Sub/Cluster
- **It’ll take a while, yes. But all solutions do.** And ensures all comers treated fairly, work through in order, in a manner that actually gets maximally usable results for as many folks as possible. (We appreciate that BPA has recognized this.)

# C) Strawman Concept + Reforms

- **C) Strawman Proposal: “Alt 3B” + Additional Reforms and Commitments (Combo Package)**
  - i. Overview
  - ii. Catch-Up Effort
  - iii. TSEP Pause
  - iv. Alternating TSEP & GI Cluster Years
  - v. Triaged Sub/Clusters Concept(s)
  - vi. Known Needed
  - vii. Major Load Assumptions
  - viii. Additional Creative

## “Alt 3B” + Additional Actions:

- **Staffing:** Front end, back end, proj mgt, etc
- **GI Pause:** Pick Date (and/or Grid Areas) for Pause on New GIRs
- **TSEP Pause:** Space for Catch-Up bandwidth + no point in rushing to nowhere
- **Catch-Up Effort: Pre/Transition Period, Need Priority Push**
  - For Existing GIs (especially those long-waiting)
  - For TSEP: Do best job on current TSEP, most value, more granular
  - For Planning Upgrades
  - For “Known Needed”
  - For LLIR
- **New Process Needs:**
  - **Unlock “Known Needed”** from TSEP (and GI) Processes
  - **Major Loads & Study Assumptions:** Anchor Points

# TSEP “Catch Up Year” Proposal - 3



- **Recommendation: Decide “Today” to Skip 2023-24 TSEP Cycle**
- **Instead: Use additional time (compression relief) to:**
  - **1) Enable BPA’s team to do the best possible job in Current TSEP, go the extra mile in creativity, solutions, analysis.**
    - BETTER, MORE ACTIONABLE RESULTS IS MORE IMPORTANT than RUSHING to an ill-fated next TSEP cycle. Practical reality of current TSEP queue volume limits urgency.
  - **2) Free up resources to work on Interconnection Study Catch-Up work:**
    - Bandwidth for Interconnection Studies will Help Core Issue HERE
    - IX Studies’ completion then better informs next TSEP

# Current TSEP: DoBest, then Pause

## Take time for better results, more staff, for more fruitful efforts

- BPA's current 2022-2023 TSEP cycle underway
- Delayed Study Notice Issued
- NewSun supports that decision
- NewSun recommends BPA take extra time for current TSEP
- Focus on best possible plans of service, including partial breakpoints N/Us where possible
- Incorporate beneficial GI studies results as input, where feasible
- **No need to “rush to nowhere”, as “next TSEP” will already be behind the (obviously coming) mega-upgrades that** current (and last) year's TSEPs identify (like BigEddy-Chemawa). Next wave TSRs unlikely to have timeline relevant viability anyways (15-year NEPA delays for much of 2022-23 report).
- Better to garner bandwidth for GI Catch-Up, Load Study Support, Transmission Planning, and Known Needed upgrades.
- **Focus on translating TSEPs' identified needs into optimized projects, practical roadmaps**

# Catch-Up Effort: Current GIRs



- Recommend BPA prioritize full study and process of existing GIs
- Maximize all results to current GIRs
- **Anyone that never got Feasibility/SIS/FAC per OATT schedule, by now, by transition points, deserves to get at least full studies they'd have gotten, without facing removal exposures, new burdens, costs, etc**
- Basic fairness, but also...
- Senior queue positions most viable, and
- Not their fault
- (Examples)
- **Transition Cluster Start Date (and other dates) should float until Catch Up meets Select Criteria**
- Make space and bandwidth with other paired actions/recommendations (TSEP Pause)

# Catch-Up Effort: GIs – Supporting Actions

- **Expand Sub/Grid Group Reports where possible**
- **Voluntary IC coordination/scoping meetings**
  - Identify downsizes & cost-sharing opportunities
- **Prioritize completing study work through pre- mega-upgrades** (plus some contingency). Most important are most viable, before 500KV + 15-yr NEPA
- **Load Assumptions**
  - Include more robustly (discussion + BizPractices + load discussion)
  - Consider load-provisional &/or interim service offers
- **Re-Reviews before Final Transition Cut-Offs**
  - Check again – and re-check – for Load, TSEP, Known Needed
    - Note TSEP has continuous review practice
  - Beneficial Transmission Rights (TSAs, TSRs)

# Add'l Supporting Reforms: “Known Needed Upgrades”

- **Deep GI/TSEP Queues + Common E>W Flows = Knowable Needs =**
  - GI Queue 100GW+ deep; TSEP/LTF-p Queue [50 GW+]
  - Bottom-of-Stack, **Commonly Needed Upgrades**
    - Indifferent to *which* GIRs, TSRs... Needed by Everyone, At Least first 5, 10, 20 GW...
- **Unlock these “known needed” upgrades from TSEP/GIR process**
  - Get Design+EarlyNEPA accelerated out of PEA/ESA cycle
  - Ability to pick-up 2-5 years on current N/U timelines
  - Examples: Big Eddy-Chemawa (2022 TSEP) + PGE interface
  - DesignExpenditures vs CapEx
  - Unlock \$MMs to *accelerate the starting point* on the \$B projects
  - Practical, efficient, breaks key who’s-on-first slo-mo bottleneck
  - Funding: Mix of: IOU (regulatory obligations) + Rates + GI/TSEP



# Known Needed Projects - Examples



- PGE system interface
- SOA
- CCN cap banks
- CCS:
  - Big Eddy Chemawa: New Dbl Ckt Line
  - Additional Somewhere!
- John Day – Big Eddy
- Central Oregon: TX to Best Sun

# Additional Reforms: Major Loads & Timing Assumptions



- Major Industrial Loads, 100s of MW, GWs
- Assumptions in Model
- Solutions Available to Mitigate GI Study Issues (i.e. Total Upgrades)
  - Allow for Assumption of [% of Select Loads]; and/or
  - Allow for Load-Timing Contingent Energization
    - Could avoid mega-upgrades
  - Ask Loads for Security \$



# Other Creative Solutions

- **BPA identifies high priority upgrades – presumed to benefit GIs to reasonable point(s)**
  - Doesn't have to cover full queue, but most senior + most commonly needed could/should mitigate need to burden GIRs with these obligations
  - Including "Known Needed"
- **Loads could help securitize N/U and Power Flow assumptions**, re: ability to assume [major loads] will exist by [dates]. Eg 250 MW by 2032. Which if counterflow will mitigate N/U build needs. Avoiding several problems, including costs, NEPA, allocations, removals, etc.
- **Contingent Energization Options**, re: Loads, Upgrades, Curtailments, Transmission Service (subject to seniority)
- **How dealing w/ Merchant Transmission**, like Cascade Renewable Trans?

## Other Creative Solutions (2)

- **Refresh Organic Load Growth** for Post-Heat Dome Hockey Spikes
- **Revisit Conservatism in Assumptions**
- **Special obligations for Mega-LGIRs** meeting certain criteria:
  - > 1000 MW
  - Trigger a new 500 KV on their own
  - Fail to downsize to avoid mega-upgrade
  - Owned by IOU LSE (due to self-dealing abuse expo

# Summary



# Summ: Key Takeaways & Recommendations



- Err in Favor of “No Harm”
- Low Hanging Fruit = Batch/Cluster Studies = High Yield, Low Risk Change
- Benefits of Retaining Current Seniority Based approach
- Readiness Criteria = As-Many/More Problems than Benefits
- Don’t Have to (Try to) Solve *Every* Problem/Issue Now
- Focus on Facilities Good Studies -> Projects=Supply to Market

# Summ: Key Policy Recommendations



- Year-Round Open Queue Window (till Close Date(s))
- Seniority Based
- No Readiness Criteria\*
- Bi-Annual TSEP + GI Cluster Alternation
- Cluster Triage Concept
- Pair Reform with Staffing Commitments
- Preserve BPA Areas of Excellence + Self-Consistency
- Avoid Policies that are Administrative Burdensome &/or add Who-Plays-God
- Be Practical & Realistic About How Proposals/Policies Will Go in Practice (including re: Market/IC/TC Behaviors)
- Don't forget Public Power – Not all about the IOUs
- **Think outside the Rate Case! BPA can make commitments beyond TC-25**

THANK YOU!!

NewSun<sup>™</sup>  
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