



# ***De Minimis* Policy Direction**

**July 30, 2020**

# Agenda

- Introduction from Michelle Cathcart, VP Transmission System Operations.
- Review the *de minimis* policy objective and decision criteria.
- Share Long-Term *de minimis* policy direction.
- Discuss customer feedback from May 29, 2020 WebEx.
- Share Short-Term *de minimis* policy direction.
- Discuss next steps.

# De Minimis Objective

The objective is to ensure the *de minimis* policy aligns with agency strategy goal #4 to meet transmission customer needs more efficiently and responsively.

## Agency Strategy

**BPA's 2018–2023 STRATEGIC GOALS**  
DELIVERING ON OUR PUBLIC RESPONSIBILITIES THROUGH A COMMERCIALY SUCCESSFUL BUSINESS

- #1 STRENGTHEN FINANCIAL HEALTH** Improve cost-management discipline, build financial resiliency and maintain strong credit ratings.
- #2 MODERNIZE ASSETS & SYSTEM OPERATIONS** Administer an industry-leading asset management program; modernize federal power and transmission system operations to leverage market and technology developments.
- #3 PROVIDE COMPETITIVE POWER PRODUCTS & SERVICES** Increase revenues; align the region around a durable and financially sustainable fish and wildlife plan; align energy efficiency investments with long-term needs; achieve a modernized Columbia River Treaty.
- #4 MEET TRANSMISSION CUSTOMER NEEDS EFFICIENTLY & RESPONSIVELY** Make more flexible, scalable, economical and operationally efficient transmission investments; support efficient regional resource development; streamline processes; standardize products and services.

## Transmission Business Model

**WE ENERGIZE THE PACIFIC NORTHWEST**

**Transmission Value Proposition**

- Operating a High Performing Grid
- Enabling Economic Growth in the Region
- Providing Access to Federal and Non-Federal Resources And Markets

**Through Excellence**

- Product Portfolio** Providing standardized options  
Value-based price profiles  
Drawing from integrated regional planning
- Infrastructure** Advanced situational awareness  
Right-sized investments in assets  
Value and risk-based asset management
- Long-Term Viability** Integrated and efficient processes  
Data-driven decision making  
Innovation and continuous improvement

**A Dependable and Responsive Business Partner**

*The Transmission Business Model is supported by the Agency Strategy to position BPA to be a dependable and responsive business partner*

# *De Minimis* Policy Goals

To achieve our overall objective, BPA is striving to reach these primary policy goals:

- Address transmission service requests through business practices and documentation that are clear and streamlined to accurately reflect policy, processes, and systems.
- Offer more standardized products that are aligned with BPA's OATT and are reflective of pro forma and/or industry best practices.
- Ensure that our proposed policy respects available transmission capacity, limits curtailment risk exposure, and preserves transmission system reliability.

# ***De Minimis* Decision Criteria**

1. Aligns with BPA's statutory and legal obligations, authorities or responsibilities.
2. Preserves the reliable and efficient operation of the Federal system.
3. Prevents significant harm or provides significant benefit to BPA's mission or the region.
4. Aligns with the FERC *pro forma* tariff or industry best practice.
5. Considers the cost of implementation and maintenance.
6. Considers Customer Satisfaction.

# ***DE MINIMIS*** **LONG-TERM POLICY UPDATE**

# Long-Term Policy Update

## Issue

- BPA needs to resolve the inconsistency between posted documents and implementation, and provide a response to customer concerns that BPA is not consistently applying the *de minimis* policy as posted.

## Analysis of Issue

- Initially it was thought that the table and narrative in the *De Minimis* Dead Band for Network Flowgates document incorrectly described how BPA was implementing *de minimis* in the long-term time horizon.
- After further analysis of the Long-Term ATC Management Tool (LTAMT) implementation of *de minimis*, it was noted that Test 1 is implemented as described.
- BPA saw an opportunity to provide additional clarity in the documentation which would enhance customer understanding of the implementation of *de minimis* in the LT horizon.

# Long-Term Policy Possible Options

- **Option 1:** Status Quo: Do not alter posted documentation.
- **Option 2:** Clarify the posted documentation: Reflect cases in which an impact will be treated as a 0MW impact in the evaluation of Long-Term requests.



# Long-Term Policy Direction

**Option 2:** Clarify the posted documentation: Reflect cases in which an impact will be treated as a OMW impact in the evaluation of Long-Term requests.

- The team has determined that clarification is needed in both the narrative language and description section of the TSR Evaluation document (new BP that replaces the *De Minimis* Impact for Network flowgates, Version 16 document) for long-term.
- This will provide further clarification to customers for how TSRs are evaluated for *de minimis* in the long-term.
- Implementation will be discussed later today.

# ***DE MINIMIS*** **SHORT-TERM POLICY UPDATE**

# Customer Feedback

- At the May 29<sup>th</sup> WebEx, BPA requested feedback from customers on the two identified options.
- Comments were received and are posted externally at:  
<https://www.bpa.gov/transmission/Doing%20Business/ATCMethodology/Pages/Customer-Comments.aspx>

# Customer Comments

## Comment

- Bonneville's May 29th presentation identified other alternatives, such as a threshold on *de minimis* capacity, but Bonneville has not provided sufficient explanation as to why these alternatives were summarily eliminated from consideration.

## BPA Response

- BPA heard customer concerns that redirects with small additional impacts should be allowed.
- BPA developed a compromise solution with Option 2 presented at the May 29<sup>th</sup> customer workshop. Based on customer response, this was not an acceptable compromise.
- None of the remaining original alternatives are industry standard, nor are they Pro Forma in nature.
- BPA also feels the alternative further supports unbalanced access to *de minimis* capacity in the short-term market for PTP and NT customers.

# Customer Comments (cont.)

## Comment

- A managed threshold limit on the collective amount of *de minimis* capacity in a given hour may be appropriate.

## BPA Response

- While we raised the idea of a “bucket,” we have since identified a number of concerns with the impacts of a “bucket.”
  - For flowgates that are important to customers BPA would need to determine what the threshold would be.
    - BPA would set the threshold at 3-5%.
    - BPA is currently at this limit.
  - Allowing a threshold limit would not only impact redirect requests, but it would impact original requests.
    - Impacts to NT customers.
  - Transparency issues when customer is denied service due to threshold limitations.
  - System complexity associated with implementation.

# Customer Comments (cont.)

## Comment

- Most customers that provided comments did not indicate support for Option 1 or Option 2.
- There is no exchange or benefit for Option 2.
  - NT Customer Group feels Option 2 would reduce their *de minimis* threshold in half in order to provide a Test 2 for PTP customers.
  - If BPA were to adopt Option 2, NT customers recommend retaining the 10% Test 1 threshold for NT customers.
  - It is not fair nor equitable for NT customers and should be rejected.
- PTP customers support a “pilot” or implementation of Test 2 for a period of time to further analyze impacts on reliability.

# Customer Comments (cont.)

## BPA Response

- BPA heard concerns that PTP customers felt redirects with small additional impacts should be allowed. This is why BPA developed a compromise solution with Option 2 but customers are opposed to this compromise.
- BPA believes the more firm ATC that is sold, the more likely we are to curtail existing firm rights.
- Our focus continues to be protecting existing firm rights and maintaining an appropriate amount of firm on the system.
- In order to protect existing firm rights and avoid curtailments, it is not prudent to continue granting additional firm capacity when the ATC is at 0MW.

# Customer Comments (cont.)

## BPA Response (cont.)

- BPA does not believe it is prudent to change the current implemented policy. The information and analysis shared with customers has indicated there is *de minimis* capacity that is **not** included in Short-Term ATC calculations.
- Based on the information shared with customers, BPA is already at a 3-5% cumulative impact as a share of TTC for certain paths which have *de minimis* granted capacity. In part, this is why BPA direction is to not implement a *de minimis* Test 2.



# Customer Comments (cont.)

## Comment

- Both options devalue existing LTF rights and limit flexibility of existing LTF rights.

## BPA Response

- BPA understands that customers want to preserve their ability to leverage LTF rights through short-term firm redirects. BPA wants to be clear that:
  - Limited flexibility on firm usage in the ST does not infringe on customer rights to use their Long-Term firm capacity on the path they purchased.
  - Customers have the right to request redirects, but accept risk that service will not be granted, subject to limited capacity on constrained flowgates.

# Customer Comments (cont.)

## BPA Response (cont.)

### Devalues Existing LTF Rights

- Long-term rights are encumbered based on the original customer requested SOURCE/SINK path.
- Customer reliance on short-term firm redirects is a business strategy that carries inherent risk because it is subject to another ATC check. The redirect cannot be guaranteed on a firm basis.
- BPA gives full credit for existing parent rights by using “netting” when evaluating STF redirects.

### Limits Flexibility of Existing LTF Rights

- Customers retain the right to request redirects, but the OATT does not and has not guaranteed that the redirect will be granted as firm.
- Customers still have the flexibility to utilize secondary non-firm transmission service to move energy on the system. This has been, and will continue to be, an option for customers needing flexibility.

# Customer Comments (cont.)

## Comment

- Customers want *de minimis* implemented in a manner that reflects their understanding during TC-20 settlement discussion.

## BPA Response

- BPA was unaware of customers' misunderstanding of *de minimis* during TC-20 settlement discussions.
- *De minimis* discussions, at this level, were not a topic of discussion in the TC-20 settlement.
- It was only after BPA implemented the limitations on hourly firm that customers raised concerns about STF *de minimis* rules for redirects.
- After review of its documentation, BPA identified some inconsistencies.
- BPA is making a concerted effort to ensure our documentation is clear, streamlined, and transparent to reflect our practices.
- We will discuss this further in the implementation topic today.

# Customer Comments (cont.)

## Comment

- No demonstration of negative impacts to reliability by applying both *de minimis* tests to ST redirects.

## BPA Response

- Increased firm on congested paths increases the risk of curtailment of firm transmission that is used for load service.
- Based on the information shared with customers, BPA is already at a 3-5% cumulative impact as a share of TTC for certain paths which have *de minimis* granted capacity. In part, this is why BPA direction is to not implement a *de minimis* Test 2.

# Customer Comments (cont.)

## Comment

- Adjust timeline and discuss comments further before making a decision.

## BPA Response

- BPA has discussed *de minimis* with customers at 6 workshops to date: November and December of 2019, and January, February, March, and May of 2020.
- BPA plans to maintain its current timeline to complete the documentation realignment through the business practice process.
- Customers will have the opportunity to comment on the redlined business practices and related documentation that will be posted out-for-comment.

# Customer Comments (cont.)

## Comment

- Concern with Washington and Oregon increased RPS requirements.
- Customers need to meet these RPS requirements and BPA needs the ability to meet customer needs.

## BPA Response

- BPA runs an annual Cluster Study to address customer LTF transmission needs.
- Based on the Cluster Study results, BPA works with customers to determine if there is a need to build to meet customers' needs.
- We encourage customers to contact your Transmission AEs for further assistance.

# ***DE MINIMIS*** **SHORT-TERM POLICY DIRECTION**

# Review of Option 1 of 2

- **BPA Alternative 1 – Current Implementation**
  - *De minimis* in the short-term should be to grant requests that have an inconsequential impact on a constrained flowgate, while giving full credit for rights held on long-term firm parent paths. Status quo already meets this purpose.
  - The current policy is consistent with our Tariff .
  - Consistent with other flow-based providers. No industry precedent for Test 2.
    - BPA threshold is 10%, while other providers have a threshold of 3-5%.
  - Any other alternative would require customization of the industry software used to calculate ATC. A separate future customization would be needed for NITS.
  - Adopting Test 2 in the short-term would increase the cumulative *de minimis* impacts by an uncertain amount, possibly increasing flowgate congestion.
  - Avoids the compounding problem associated with Test 2.
  - If BPA were willing to take on increased short-term risk to ATC, that is best accomplished via short-term ATC improvements that benefit all customers.



# Review of Option 2 of 2

- **BPA Alternative 4: Add a Test 2 with a 3% threshold:**
  - PTP customers will benefit from greater redirect flexibility. Redirects may be granted in the absence of ATC, even if the parent does not hold sufficient rights.
  - The 3% threshold for Test 2 adopted from industry threshold for Test 1.
  - Lower threshold helps mitigate risk of congestion from accumulating impacts.
  - Alternative 4 approach uses a fixed criteria regardless of MW requested.
- **Decrease current Test 1 threshold from 10% to 5%:**
  - This change impacts all requests under Test 1 (Original and Redirects).
  - Trade-off necessary due to the risk of adding a Test 2 criteria.
  - Brings BPA into alignment with industry practice for a Test 1 threshold.
- **Test 2 would not apply during firm or non-firm TLR Avoidance:**
  - For the flowgate(s) impacted by a TLR Avoidance event, Test 2 uses a 0% threshold to prevent increased impacts during actual congested flows.
  - Test 1 does still apply at 5% during TLR Avoidance for both Original and Redirects.
  - Redirects still benefit from netting up to (but not exceeding) existing parent rights.

# *De Minimis* ST Policy Direction

## Option 1, BPA Alternative 1 - Current Implementation

- Make no changes to the current *de minimis* implementation in the short-term market.
- Test 1 will continue to be applied equally to short-term original and redirect requests to determine if the ATC impact on a given constraint is considered *de minimis*.
- No Test 2 will be applied to the net impact calculation of short-term redirects.
- The ATC evaluation for a given constraint will continue to fail if a short-term redirect has a positive non-*de minimis* impact on a constraint and that impact is greater by any amount than the impact the parent reservation already holds on that same constraint.
- If a request fails the *de minimis* Test 1, then there must be positive ATC in order to be granted.

# *De Minimis* ST Policy Direction (cont.)

## Direction Considerations

- BPA has taken into consideration customer feedback and analysis performed by staff in determination of our direction.
- Based on comments received as of 6/12/20, neither customer group supported Option 1 or the compromise Option 2 approach.
- Our operations group is not comfortable with increasing the amount of *de minimis*.
- If we were to proceed with a test 2 or even a “pilot” for test 2:
  - It would consume significant staff time
  - Would require customization to the vendor software which BPA avoids unless there is a very strong business need to do so.
  - A pilot of or implementation of a test 2 would increase the amount of *de minimis* awarded and we are already at the upper limit of what we are comfortable with.

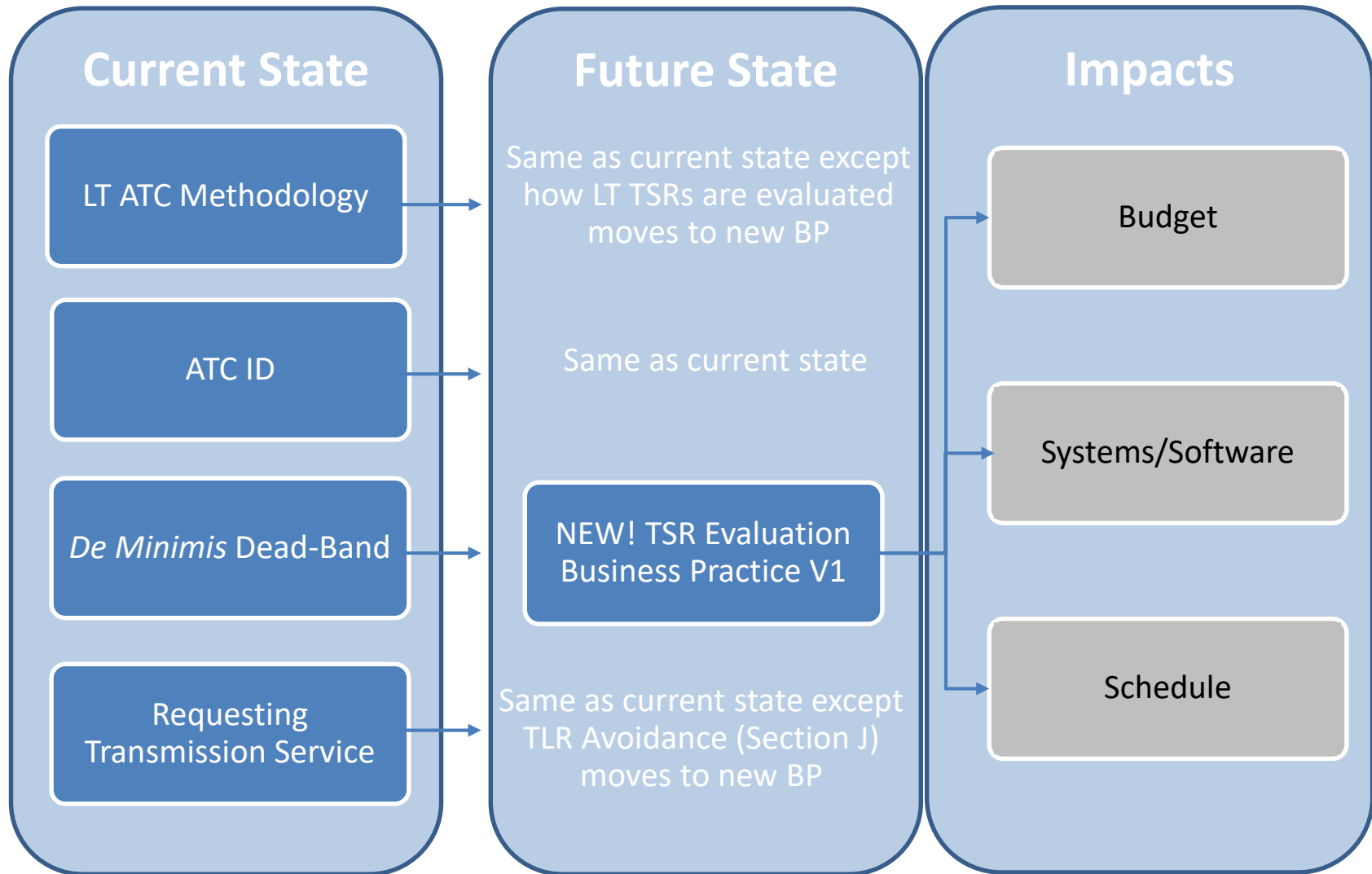
# ***De Minimis* ST Policy Direction (cont.)**

## **Direction Considerations (cont.)**

- Both customer groups are balanced in their ability to secure *de minimis* capacity.
  - Allowing a test 2 unbalances customer ability to access firm capacity in the short-term market.
  - NT customers would not have access to this capacity and feel strongly that there is no trade-off for a test 2 in the short-term market.
  - Test 2 would only be available for PTP customers that are redirecting in the short-term market.
- BPA is adhering to its Strategic Goal
- Implementation of a test 2 in the short-term is not industry best practice.

# ***DE MINIMIS* POLICY DOCUMENT REALIGNMENT**

# Documentation Realignment



# New Proposed Business Practice

## TSR Evaluation Business Practice V1

To provide one document for how TSR are processed and evaluated, BPA is proposing to replace the *De Minimis* Dead-Band document with a new Business Practice covering LT and ST, respectively

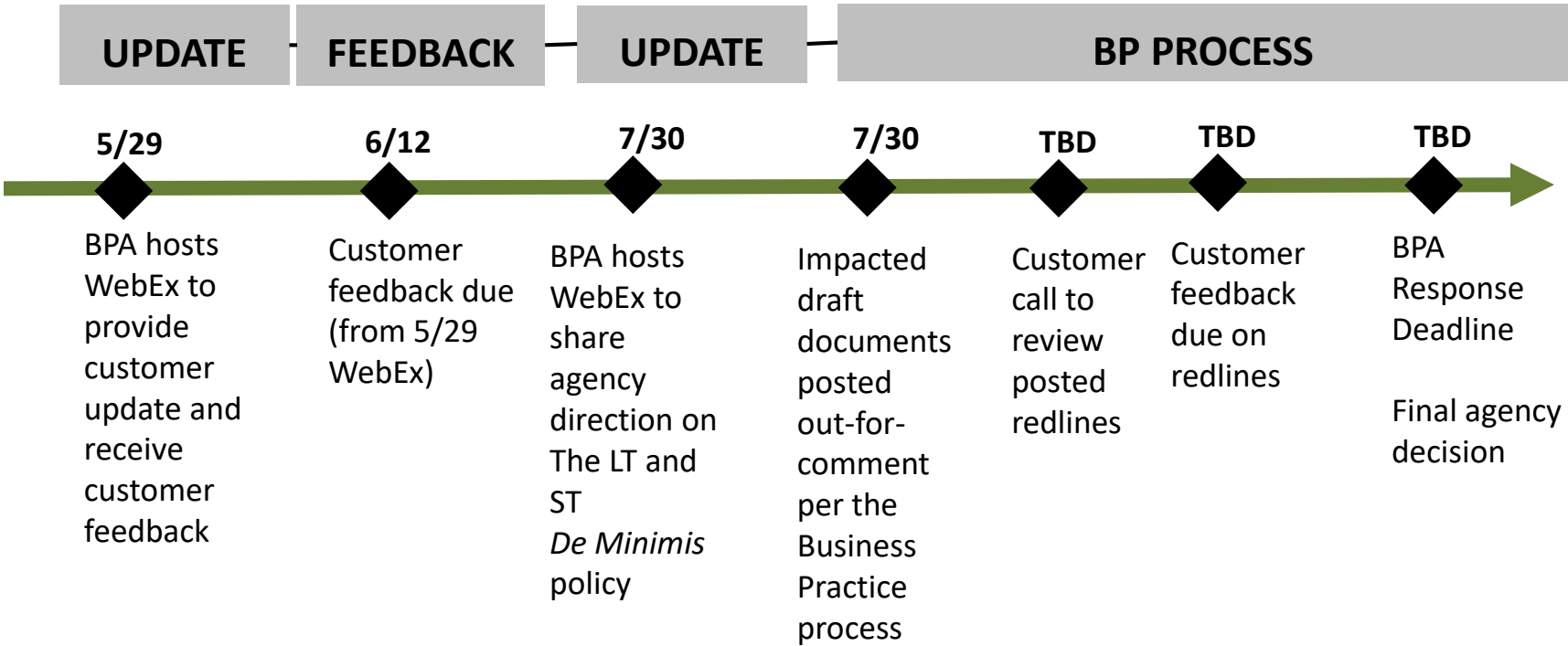
## Evaluation of Long-Term TSRs

- Impacts of LT Requests & NT Forecasts
- LT *De Minimis* Impacts

## Evaluation of Short-Term TSRs

- Impacts of ST Requests
- ST *De Minimis* Impacts

# De Minimis Schedule





# Next Steps

- Kick-off the Business Practice Process to modify impacted documents based on this policy direction.
  - BPA will post out-for-comment redline documents that describe how BPA evaluates TSRs in the short-term and long-term, respectively.
  - BPA will host a WebEx call to discuss the redlines posted.
  - Customer comment deadline on redlines.
  - BPA will respond to the redlines posted and will issue a final agency decision on the documentation.
  - Tech Forum notices will be sent out to provide regular updates.
- Customer comments on de minimis related policy can be found at: <https://www.bpa.gov/transmission/Doing%20Business/ATCMethodology/Pages/Customer-Comments.aspx>
- Please feel free to contact your AE directly with questions or send an email to [techforum@bpa.gov](mailto:techforum@bpa.gov) with “de minimis policy” in the subject line.

# Appendix



# ***Short-Term De Minimis Update***

**May 29, 2020**

# ***Short-Term De Minimis Update***

- BPA will review the *de minimis* policy objective, decision criteria, policy analysis, industry scan and share our initial leaning on a short-term *de minimis* policy.
- BPA encourages customers to ask questions during the presentation and to submit written feedback on their preferred short-term *de minimis* policy alternative following the Webex.
- BPA will share next steps to update *de minimis* related documentation to reflect how transmission service requests are evaluated.

# *Long-Term De Minimis Update*

- Long-Term analysis is moving forward but has been delayed due to the social distancing impacts of COVID-19.
- The scope of long-term *de minimis* policy
  - *Includes de minimis* related documentation that will align with the final *de minimis* policy decision and implementation (eg. systems and tools).
- BPA will send notice to customers announcing any future meetings and/or postings of materials out-for-comment.

# What is *De Minimis*?

- Definition: Too trivial or minor to merit consideration
- Policy used to grant service in the absence of ATC, as long as the impact is insignificant
- Service deemed *de minimis* is treated as zero in the ATC calculations
- Only used for flowgate evaluation, not inerties

## ***De Minimis Policy***

**Step 2: Define the issue or opportunity**

**Step 3: Analysis of Issue**

**Step 4: Possible Alternatives**

**Step 5: Customer Feedback**

**Step 6: Options**

**Next Steps**

# Step 2: Issue or Opportunity



# Issue or Opportunity

- Hourly firm transmission was limited effective July 2019.
- During the transition to implementation, transmission customers became aware of and raised concern that BPA is not consistently applying the *de minimis* policy as posted.
- BPA needs to clarify its posted documents and provide a response to customer concerns.

# De Minimis Objective

The objective is to ensure the *de minimis* policy aligns with agency strategy goal #4 to meet transmission customer needs more efficiently and responsively.

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- Offer more standardized products that are aligned with BPA's OATT and is reflective of *pro forma* and/or industry best practices.
- Ensure that our proposed policy respects available transmission capacity, limits curtailment risk exposure, and preserves transmission system reliability.

# Step 3: Analysis of the Issue

# Current Implementation of *De Minimis* Criteria

Criteria used to evaluate long-term TSRs:

- It uses a “net impact” criteria for both Test 1 and Test 2.
- Test 2 criteria allows the Redirect to exceed the parent impact with no ATC.

Definitions	A = 0 MW or positive Flowgate MW impact of new request B = 0 MW or positive Flowgate MW impact of original reservation, if any. (A - B) = Net Flowgate MW impact PUF <sub>A</sub> = Flowgate PUF associated with POR/POD of new request		
Test 1	(A - B) ≤ 10 MW AND PUF <sub>A</sub> ≤ 0.1000	Test 2	(A - B) ≤ 10 MW AND (B ÷ A) ≥ 0.8000, for non-zero A values

Criteria used to evaluate short-term TSRs:

- Uses “total impact” rather than “net impact” for PTP and NT requests alike.
- No Test 2. ATC is needed if the Redirect has more impact than the parent.

Definitions	A = 0 MW or positive Flowgate MW impact of new Original or Redirect request PUF <sub>A</sub> = (POR <sub>PTDF</sub> - POD <sub>PTDF</sub> ) of TSR A		
Test 1	A ≤ 10 MW AND PUF <sub>A</sub> ≤ 0.100	Test 2	No Test 2 used in the short-term

# Short-Term Netting of Existing Rights

- Flexibility in using existing LTF rights is important to PTP customers.
- The current approach gives full credit for existing parent rights by using “netting” when evaluating short-term Redirects.
  - This means that a Redirect will be granted when ATC is zero as long as the customer holds parent rights that meet or exceed the ATC needs of the Redirect.
- The current approach does not guarantee that a customer can exceed their existing rights when redirecting into the short-term market.
  - If a short-term Redirect has a greater impact than the parent (however small), then ATC is needed.

Request	POR	POD	PTDF	Redirect Impact	Parent Impact	Net Impact	Result	Comment
Redirect	BC.US.Border	JohnDay	0.2276	22.76	23.95	-1.19	Pass	Redirect needs 1MW <u>less</u> than the parent already holds.
Redirect	BC.US.Border	BigEddy	0.2395	23.95	22.76	1.19	Fail	Redirect needs 1MW <u>more</u> than the parent already holds. With no Test 2 criteria, new ATC is needed.

- In the long-term, the impact of a Redirect can exceed that of the parent and still be granted in the absence of ATC. This is what Test 2 accomplishes.
- Test 2 would not benefit NT customers if adopted today.

# Treatment of Short-term Original and Redirects

Original and Redirect requests are treated identically under Test 1.

Request	POR	POD	PTDF	Total Impact	Parent Impact	Net Impact	Result	Comment
Original	BPAPower	Franklin	0.0714	7.14	N/A	N/A	Pass	Original is <i>de minimis</i> , so it is accepted.
Redirect	BC.US.Border	BigEddy	0.2395	23.95	22.76	<del>1.19</del>	Fail	Same example. The Redirect is not <i>de minimis</i> and needs more capacity than the parent. It fails under current short-term rules.

**Summary:** The Redirect fails only needing 1MW more than the parent (net impact), whereas the Original is accepted for 7MW. Note these requests have different POR/POD's. The key is the *de minimis* criteria is based on the total impact, so the Redirect is not *de minimis* (24MW) but the Original is (7MW).

Request	POR	POD	PTDF	Total Impact	Parent Impact	Net Impact	Result	Comment
Original	BPAPower	Franklin	0.0714	7.14	N/A	N/A	Pass	Original is <i>de minimis</i> , so it is accepted.
Redirect	BPAPower	Franklin	0.0714	7.14	0	7.14	Pass	The Redirect is also accepted under the very same <i>de minimis</i> rules as the Original.

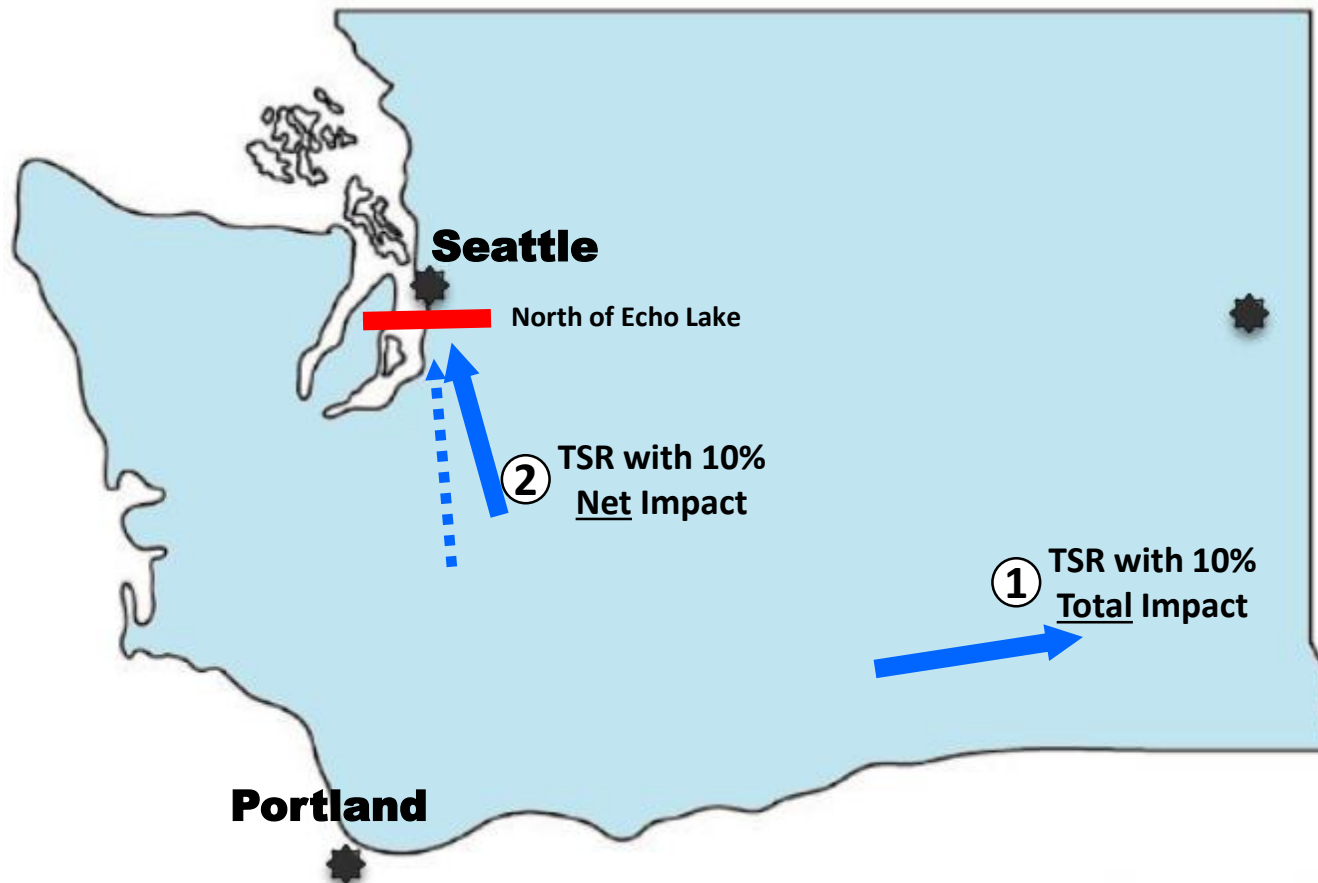
**Summary:** The *de minimis* rules are applied equally to Original and Redirect requests for the same request for service (same POR/POD). Per Section 22.2 of the OATT, a Redirect is indeed being "treated as a new request for service" by evaluating the total impact on a flowgate as the Test 1 *de minimis* criteria.

**There is no situation in which a short-term Original request will be granted for which an equivalent short-term Redirect is denied for the same service (POR/POD).**

# Net Impact vs Total Impact *De Minimis* Criteria

Compare the transmission service that may be possible under constrained NOEL flowgate:

1. Original and/or Redirects using Test 1 based on 10% Total Impact on NOEL.
2. Redirect using Test 2 based on a Net Impact on NOEL.





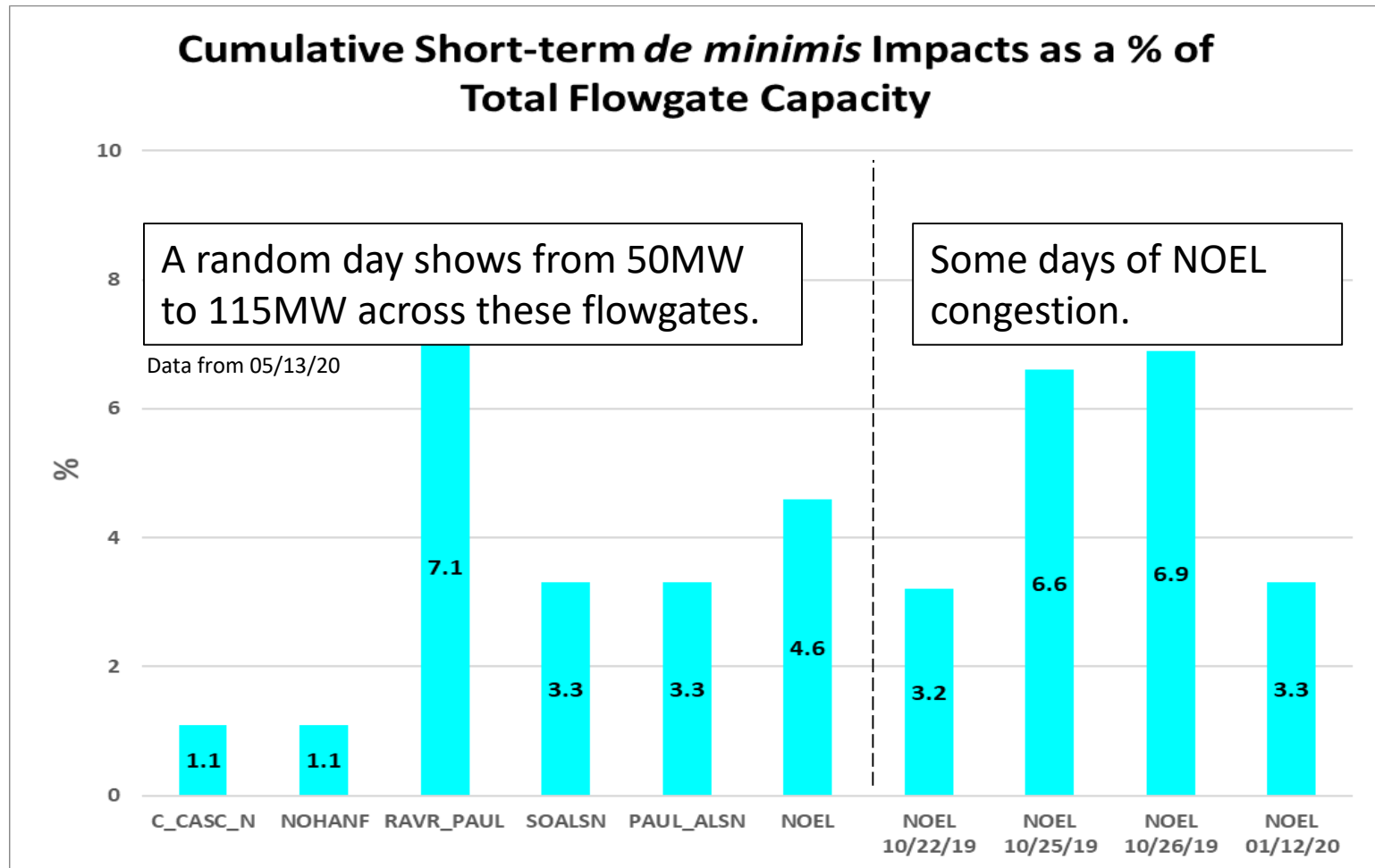
# Industry Scan of *De Minimis* Policy

- Currently there are no industry standards or regulations governing how *de minimis policy* is defined or implemented. NAESB is silent in its standards. There are no specific FERC regulations, but FERC has approved tariff filings that include *de minimis*.
- It appears that TPs have discretion on how to apply *de minimis* criteria to the evaluation of TSR's based on the risk profile and reliability needs of their system.
- BPA staff benchmarked other flow-based TPs (MISO, SPP, Duke, Dominion).
- The BPA ST *de minimis* policy is consistent with (and more generous than) our peers.
  - Like BPA, the other TPs evaluate short-term TSRs using a Test 1 *de minimis* criteria based on total flowgate impact for NT, PTP, original, and redirects alike.
  - However, the thresholds set by other flow-based TPs are much more strict, ranging from 3% - 5% which has been approved by FERC.
  - The BPA threshold is 10% for Test 1 *de minimis* criteria.
  - Like BPA, none of these TPs use a Test 2 *de minimis* criteria. This means that short-term redirects will be given credit up to (but not exceeding) their existing parent rights.

# Volume of LT and ST Redirect Requests

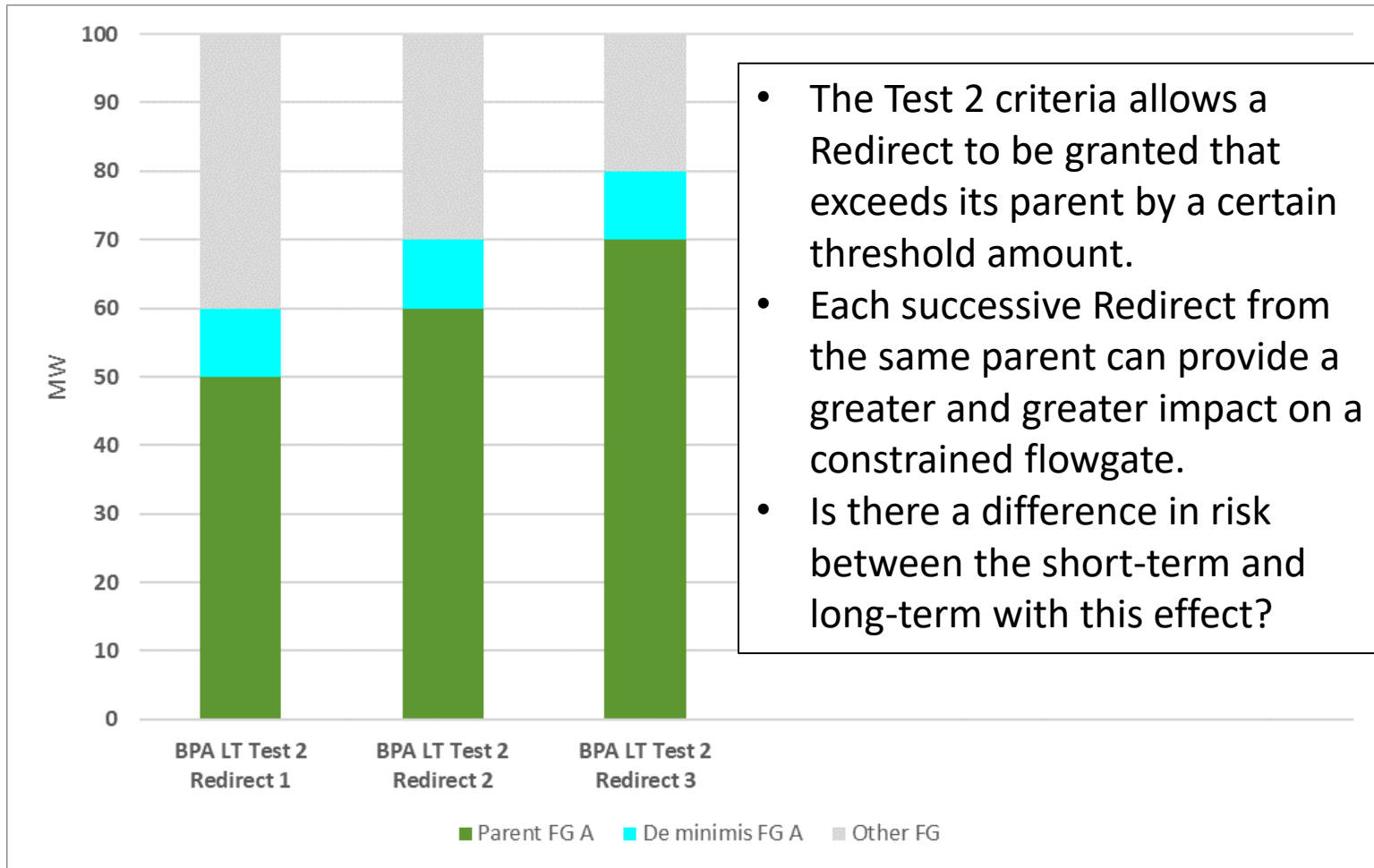
- Risk associated with *de minimis* is correlated to the volume of redirect requests that is vastly different between the short-term and long-term markets, respectively.
- No firm curtailments since full implementation of limited HF in January 2020.
- Time Period Covered - February 2019 through April 2020
  - These are all redirect requests for both time horizons
    - No filters applied to the data
      - » Includes invalid, withdrawn and annulled requests
  - Long-Term Redirect Requests
    - 260 as of February 2020
    - 306 as of April 2020
  - Short-Term Redirect Requests
    - 364,535 as of February 2020
    - 437,146 as of April 2020
      - » Confirmed Redirects - 402,406
      - » Declined Redirects – 647
      - » OASIS status other than Confirmed or Declined – 34,093

# De Minimis Impacts on Constrained Flowgates



**At what point does *de minimis* no longer have a *de minimis* impact?**

# Compounding Effect of Test 2



Does the *de minimis* policy enable an increase in existing rights?

# Risk Profile of Long-Term *De Minimis*

## Long-Term

- The *de minimis* tests are low risk
- Customers are subject to technical analysis and planning subgrid check
  - Not passing would mean that the customer is likely to enter a Cluster Study and be identified for a plan of service
  - Many customers coming in the queue are new developers that generally end up entering the Cluster Study for further analysis
- Each year, many of the TSRs calculated by PTFD (which utilized *de minimis*) are moved to the powerflow calculation, which does not utilize a *de minimis* structure
- Current long term *de minimis* count in MW. Most of these numbers will be reduced as we post the next ATC case.

Flowgate	Test 1	Test 2
SOA	2	5
CCN	2	5
WOLM	50	0
CCS	13	0
NOH	6	0
NOJD	6	2
PA	2	5
RP	2	6
WOM	16	4
WOS	4	5
WOJD	12	3
SOC	15	2
WOFH	55	0
NOEL	10	0

# Risk Profile of Short-Term *De Minimis*

## Short-Term

- Much higher amount of *de minimis* impacts
- More uncertainty in ATC because those impacts are not included
- Short-Term market is all automated and there are no limits to *de minimis* impacts
- BPA is not willing to risk additional firm flows on already constrained flowgates

Flowgate	Test 1	Test 2
SOA	105	-
CCN	129	-
WOLM	130	-
CCS	94	-
NOH	34	-
NOJD	50	-
PA	115	-
RP	117	-
WOM	80	-
WOS	69	-
WOJD	122	-
SOC	116	-
WOFH	121	-
NOEL	137	-

Data from 05/21/20

# Step 4: Alternatives

# Summary of Short-Term Alternatives

Alternative	<i>De Minimis</i> Test 2
<b>Alt. 1</b> Status Quo	No. Do NOT apply Test 2 to short-term Redirects.
<b>Alt. 2</b> Align ST with LT policy	Yes. Apply long-term Test 2 to short-term Redirects. Long-term Test 2 is the ratio between the parent PTDF and the Redirect PTDF. The threshold is >80%
<b>Alt. 3</b> Same as Alt 2, but establish a different threshold for ST Redirects	Yes. Establish new threshold to apply Test 2 to short-term Redirects. For example, apply 90% instead of 80% threshold to short-term Redirects.
<b>Alt. 4</b> <i>Establish new Test 1 threshold and a new Test 2</i> for ST Redirects based on net PTDF difference	Yes, but different from current long-term Test 2 for Redirects. For example, compare net PTDF difference (Redirect PTDF – parent PTDF) against a newly established percentage threshold ( <b>e.g., 3%, reset to 0% if TLR Avoidance</b> ). Test 1 would still be applicable during TLR Avoidance.
<b>Alt. 5</b> Another way to manage the amount of TSRs granted as <i>de minimis</i> impact	Maybe. This is complementary to all alternatives, including status quo. For example, we would grant TSRs up to a ceiling amount, without reducing ATC, until the cumulative amount of impact of <i>de minimis</i> TSRs adds up to some predefined threshold (e.g., 50 MW).

*Staff has evolved the policy alternatives to reflect new analysis and to align, to the extent possible, with other TPs with flow-based transmission systems.*



# Step 5: Customer Feedback

<b>Customer <i>De Minimis</i> Comment Themes</b>	<b>BPA Response</b>
Lack of clarity and inconsistent documentation is exacerbating the recent changes in BPA policies and practices	BPA agrees as noted in written response to <a href="#">customer comments</a>
Concern that present implementation is inconsistent with BPA's tariff	BPA addressed this concern in <a href="#">written response</a> and this slide deck.
Add to criteria that the net impact by flowgate from short-term original requests should be the same as the net impact by flowgate for short-term firm redirects	BPA does not believe this is a requirement but will be assessed in Decision Criteria #6.
Desire for quicker response in resolving this issue	BPA is seeking customer input on two viable short-term policy alternatives.

# Step 6: Options

# Short-Term *De Minimis* Decision Criteria

1. Alignment with BPA's statutory and legal obligations, authorities or responsibilities.
2. The reliable and efficient operation of the Federal system.
3. Prevents significant harm or provides significant benefit to BPA's mission or the region.
4. The FERC *pro forma* tariff is lagging behind industry best practice, including instances of BPA setting the industry best practice.
5. Cost of implementation and maintenance.
6. Customer Satisfaction

# Option 1 of 2

- **BPA Alternative 1 – Status Quo**

- *De minimis* in the short-term should be to grant requests that have an inconsequential impact on a constrained flowgate, while giving full credit for rights held on long-term firm parent paths. Status quo already meets this.
- The current policy is consistent with our Tariff by treating Redirect requests exactly the same as Original requests under Test 1.
- Consistent with other flow-based providers. No industry precedent for Test 2.
  - BPA threshold is 10%, while other providers have a threshold of 3-5%.
- Any other alternative would require customization of the industry software used to calculate ATC. A separate future customization would be needed for NITS.
- Adopting Test 2 in the short-term would increase the cumulative *de minimis* impacts by an uncertain amount, possibly increasing flowgate congestion.
- Avoids the compounding problem associated with Test 2.
- If BPA were willing to take on increased short-term risk to ATC, that is best accomplished via short-term ATC improvements that benefit all customers.

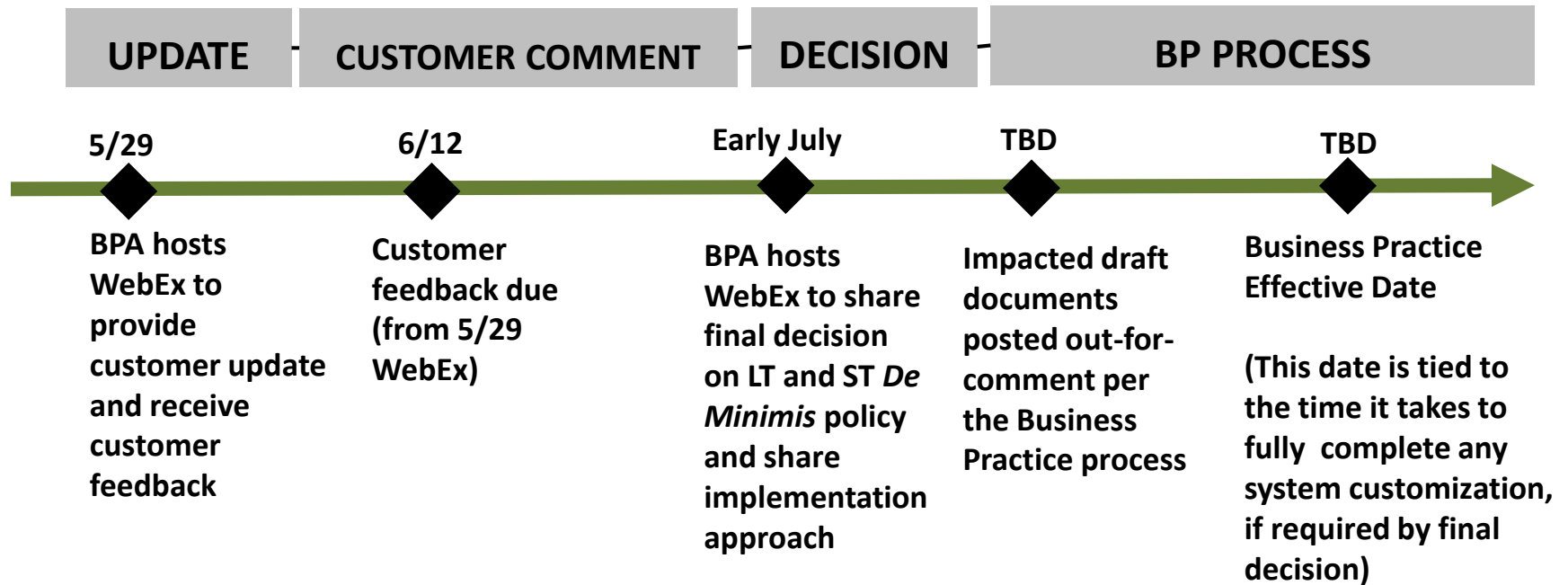
***BPA is seeking customer feedback on the impact of the two options***

# Option 2 of 2

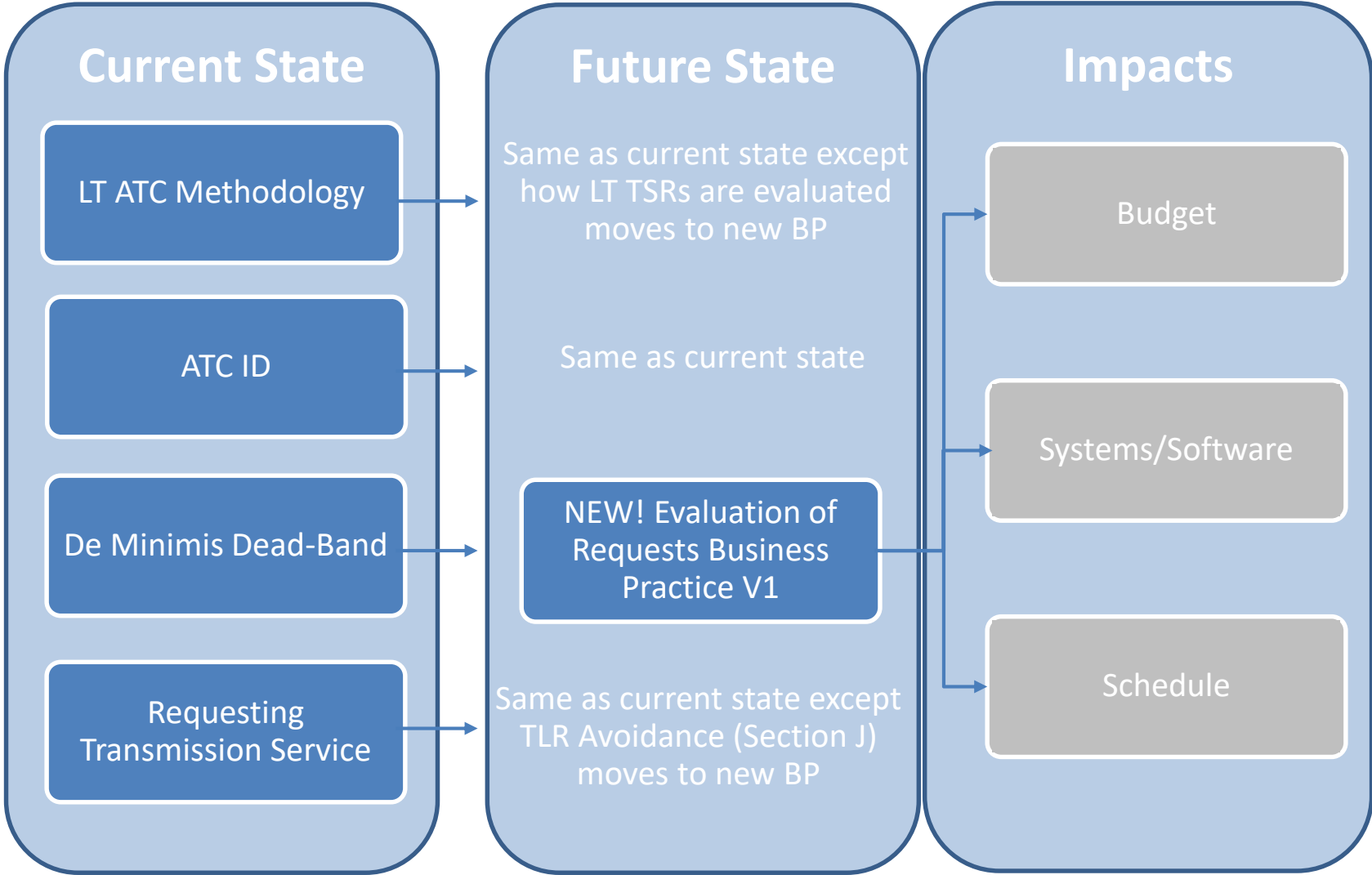
- **BPA Alternative 4: Add a Test 2 with a 3% threshold:**
  - PTP customers will benefit from greater redirect flexibility. Redirects may be granted in the absence of ATC, even if the parent does not hold sufficient rights.
  - The 3% threshold for Test 2 adopted from industry threshold for Test 1.
  - Lower threshold helps mitigate risk of congestion from accumulating impacts.
  - Alternative 4 approach uses a fixed criteria regardless of MW requested.
- **Decrease current Test 1 threshold from 10% to 5%:**
  - This change impacts all requests under Test 1 (Original and Redirects).
  - Trade-off necessary due to the risk of adding a Test 2 criteria.
  - Brings BPA into alignment with industry practice for a Test 1 threshold.
- **Test 2 would not apply during firm or non-firm TLR Avoidance:**
  - For the flowgate(s) impacted by a TLR Avoidance event, Test 2 uses a 0% threshold to prevent increased impacts during actual congested flows.
  - Test 1 does still apply at 5% during TLR Avoidance for both Original and Redirects.
  - Redirects still benefit from netting up to (but not exceeding) existing parent rights.

***BPA is seeking customer feedback on the impact of the two options***

# Proposed *De Minimis* Future Customer Communication



# Documentation Realignment





# *New Proposed Business Practice*

## Evaluation of Transmission Service Requests Business Practice V1

To provide one document for how TSR are processed and evaluated, BPA is proposing to replace the *De Minimis* Dead-Band document with a new Business Practice covering LT and ST, respectively

## Evaluation of Long-Term TSRs

- Impacts of LT Requests & NT Forecasts
- LT *De Minimis* Impacts

## Evaluation of Short-Term TSRs

- Impacts of ST Requests
- ST *De Minimis* Impacts

# Next Steps

- BPA will continue its current implementation of the *de minimis* policy as an interim step during the customer engagement process.
- The plan is to release out-for-comment redline documents that describe how BPA evaluates TSRs in the short-term and long-term, respectively. A Tech Forum notice will be sent out with more details.
- Long-Term *de minimis* analysis and recommendation notice will go out to customers once completed.
- BPA wants to understand customer trade-offs between the two identified options:
  - Option 1: Keep Test 1 at the existing 10% with no Test 2.
  - Option 4: Lower the Test 1 threshold from 10% to the industry standard of 5% and add a new Test 2 at 3%, except during TLR Avoidance.
  - **Customers are encouraged to submit feedback to [techforum@bpa.gov](mailto:techforum@bpa.gov) no later than 5:00PM on June 12, 2020.**
- Please feel free to contact your AE directly with questions or send an email to [techforum@bpa.gov](mailto:techforum@bpa.gov) with “*de minimis* policy” in the subject line.

# Appendix

# Alternative 1

- Current Implementation
- No redirect Test 2

## Test 1

$$A: MW\ Impact \leq 10MW$$

$$AND$$

$$B: (POR_{PTDF} - POD_{PTDF}) \leq 10\%_{PUF}$$

### Example using 10MW TSR

Request Type	New Request			Parent			Net Impact (Redirect MW - Parent MW)	Test 1		Result	Comment
	POR/POD	PUF	MW	POR/POD	PUF	MW		Criteria A (<= 10MW)	Criteria B (<= 10%)		
Original	BC.US.Border to BigEddy	0.2395	2.395	NA	NA	NA	NA	Pass 2.395 < 10MW	Fail .2395 > 10%	Fail	Not considered de minimis as it fails criteria B of Test 1.

Summary: An original or redirect request must pass both criteria A and B to be considered de minimis under Test 1.

### Examples using 100MW TSRs

Request Type	New Request			Parent			Net Impact (Redirect MW - Parent MW)	Test 1		Result	Comment
	POR/POD	PUF	MW	POR/POD	PUF	MW		Criteria A (<= 10MW)	Criteria B (<= 10%)		
Original	BPAPower to Franklin	0.0714	7.14	NA	NA	NA	NA	Pass 7.14 <= 10MW	Pass .0714 <= 10%	Pass	Original is de minimis, so it is accepted.
Redirect	BPAPower to Franklin	0.0714	7.14	BC.US.Border to JohnDay	0.2276	22.76	-15.62MW	Pass 7.14 <= 10MW	Pass .0714 <= 10%	Pass	The redirect is also accepted under the very same de minimis rules as the original.

Summary: The de minimis rules are applied equally to original and redirect requests. Both requests are considered de minimis under Test 1.

# Alternative 1 continued

## Examples using 100MW TSRs

Request Type	New Request			Parent			Net Impact (Redirect MW - Parent MW)	Test 1		Result	Comment
	POR/POD	PUF	MW	POR/POD	PUF	MW		Criteria A (<= 10MW)	Criteria B (<= 10%)		
Original	BC.US.Border to JohnDay	0.2276	22.76	NA	NA	NA	NA	Fail 22.76 > 10MW	Fail .2276 > 10%	Fail	Original is not de minimis, so rejected.
Redirect	BC.US.Border to JohnDay	0.2276	22.76	BC.US.Border to BigEddy	0.2395	23.95	-1.19MW	Fail 22.76 > 10MW	Fail .2276 > 10%	Pass	Redirect is also not de minimis per Test 1, but it is accepted because the redirect needs less capacity than the parent already holds (ie, Net Impact is negative).

Summary: Both requests fail de minimis Test 1. Where original requests fail, redirects can leverage parent capacity in some cases to get requests granted. Here, the parent rights fully cover the redirect capacity needs.

Request Type	New Request			Parent			Net Impact (Redirect MW - Parent MW)	Test 1		Result	Comment
	POR/POD	PUF	MW	POR/POD	PUF	MW		Criteria A (<= 10MW)	Criteria B (<= 10%)		
Original	BC.US.Border to BigEddy	0.2395	23.95	NA	NA	NA	NA	Fail 23.95 > 10MW	Fail .2395 > 10%	Fail	Original is not de minimis, so rejected.
Redirect	BC.US.Border to BigEddy	0.2395	23.95	BC.US.Border to JohnDay	0.2276	22.76	1.19MW	Fail 23.95 > 10MW	Fail .2395 > 10%	Fail	Redirect is not de minimis per Test 1 and needs more capacity than the parent holds (ie, Net Impact is positive). There is no de minimis Test 2 applied to the Net Impact.

Summary: Here, the parent rights do not fully cover the redirect capacity needs. The redirect needs ATC. If ATC is unavailable, a short-term redirect would fail. A long-term redirect would pass under Test 2.

# Alternative 2

- Adopt the same criteria as Test 2 as in the LT

A: Redirect MW Impact – Parent MW Impact  $\leq$  10MW

AND

B:  $(\text{Parent}_{\text{PUF}} \div \text{Redirect}_{\text{PUF}}) \geq 80\%_{\text{PUF}}$

Examples using 100MW TSRs

- Adopt the same 80% threshold as in the LT
- One goal in this alternative is consistency between ST and LT

Redirect		Parent		Criteria A	Criteria B (Threshold 80%)	Result
MW	PUF	MW	PUF			
20	0.20	15	0.15	20 – 15 = 5MW (does meet $\leq$ 10MW)	0.15 $\div$ 0.20 = 0.75 (does not meet $\geq$ 80%)	Fail
61	0.61	52	0.52	61 – 52 = 9MW (does meet $\leq$ 10MW)	0.52 $\div$ 0.61 = 0.85 (does meet $\geq$ 80%)	Pass

# Alternative 3

- Criteria is the same as Alt 2 but with different threshold

A: Redirect MW Impact – Parent MW Impact  $\leq$  10MW

AND

B:  $(\text{Parent}_{\text{PUF}} \div \text{Redirect}_{\text{PUF}}) \geq$  **Threshold<sub>PUF</sub>**

- Threshold may differ between ST and LT (not necessarily 80% ST)
- No specific ST threshold has been considered at this time

Examples using 100MW TSRs with thresholds of 75% and 85% for illustration.

Redirect		Parent		Criteria A	Criteria B (Threshold 85%)	Result
MW	PUF	MW	PUF			
20	0.20	15	0.15	20 – 15 = 5MW (does meet $\leq$ 10MW)	0.15 $\div$ 0.20 = 0.75 (does not meet $\geq$ 85%)	Fail

Redirect		Parent		Criteria A	Criteria B (Threshold 75%)	Result
MW	PUF	MW	PUF			
44	0.44	34	0.34	44 – 34 = 10MW (does meet $\leq$ 10MW)	0.34 $\div$ 0.44 = 0.77 (does meet $\geq$ 75%)	Pass

# Alternative 4 (3% Threshold)

- Uses a different criteria B than Alternatives 2 and 3

A: Redirect MW Impact – Parent MW Impact ≤ 10MW

AND

B: (Redirect<sub>PUF</sub> – Parent<sub>PUF</sub>) ≤ **0.03 or 3%**

- Uses a delta of PUF impacts between parent and Redirect.
- A 3% threshold is proposed to align with industry practice.
- The threshold will be set to 0% during TLR Avoidance events.

Examples using 100MW TSRs with differential threshold of 3% for illustration.

Redirect		Parent		Criteria A	Criteria B (Threshold 3%)	Result
MW	PUF	MW	PUF			
20	0.20	17	0.17	20 - 17 = 3MW (does meet ≤ 10MW)	0.20 - 0.17 = 0.03 (does meet ≤ 0.03)	Pass
61	0.61	52	0.52	61 - 52 = 9MW (does meet ≤ 10MW)	0.61 - 0.52 = 0.09 (does not meet ≤ 0.03)	Fail



# Alternatives 2 and 3 Ratio Test

- The Test 2 *de minimis* criteria is an allowance for how much the impact of a Redirect request can exceed existing parent rights on a constrained flowgate and still have service granted on that flowgate.
- Alternatives 2 and 3 use a ratio of parent to redirect impacts to determine this allowance.
- This approach provides a bigger allowance the larger the existing parent rights are.

Examples using 100MW TSRs with a Test 2 ratio of 80% from Alternative 2.

Examples	1	2	3	4
Parent <sub>PUF</sub>	.16	.24	.32	.40
Redirect <sub>PUF</sub>	.20	.30	.40	.50
Ratio (Parent <sub>PUF</sub> ÷ Redirect <sub>PUF</sub> )	.16 ÷ .20 = 80%	.24 ÷ .30 = 80%	.32 ÷ .40 = 80%	.40 ÷ .50 = 80%
<i>De minimis Impact (Allowance)</i> (Redirect <sub>PUF</sub> - Parent <sub>PUF</sub> )*Demand	(.20 - .16)*100 = <b>4MW</b>	(.30 - .24)*100 = <b>6MW</b>	(.40 - .32)*100 = <b>8MW</b>	(.50 - .40)*100 = <b>10MW</b>

- All of the examples have the same Test 2 ratio of 80%. But the parent with 40MW impact is allowed a redirect of 50MW (a 10MW *de minimis* allowance) compared to a parent of 16MW that only has a 4MW allowance (to support a 20MW Redirect).

# Compare Alternatives 2,3 and 4

- Whereas the ratio test for Alternatives 2 and 3 provide a *de minimis* allowance that will vary depending on the existing parent rights, Alternative 4 provides a *de minimis* allowance that is fixed. It is the same allowance regardless of the rights held by the parent TSR.

Examples using 100MW TSRs with a ratio of 80% compared to a delta threshold of 5%.

Redirect		Parent		Net MW (Redirect - Parent)	Alternative 2		Alternative 4	
MW	PUF	MW	PUF		Criteria B (Ratio 80%)	Result	Criteria B (Delta 5%)	Result
20	0.20	15	0.15	20 - 15 = 5MW	0.15 ÷ 0.20 = 0.75 (does not meet ≥ 80%)	Fail	0.20 - 0.15 = 0.05 (does meet ≤ 5%)	Pass
61	0.61	52	0.52	61 - 52 = 9MW	0.52 ÷ 0.61 = 0.85 (does meet ≥ 80%)	Pass	0.61 - 0.52 = 0.09 (does not meet ≤ 5%)	Fail

- Note that the ratio test for Alternatives 2 and 3 results in the granting of a Redirect that exceeds the parent by 9MW (row 1), while at the same time refusing another Redirect that exceeds the parent by only 5MW (row 2).
- Alternative 4 results in the opposite results. Both are allowed a fixed 5% *de minimis* impact allowance (ie, 5MW). Row 1 meets this criteria, but row 2 does not.

# Alternative 5

- Alternatives 2, 3, and 4 provide a criteria by which a given Redirect request may be granted, permitting a *de minimis* impact on a constrained flowgate. However, there is no limit placed on the number of such *de minimis* allowances granted under these alternatives. Over time, the accumulation of individual *de minimis* impacts may result in a significant impact.
- Alternative 5 may address this situation by setting an upper limit on the cumulative *de minimis* impacts. It is not a standalone alternative, but one that may be used in conjunction with Alternatives 2, 3, or 4.

It would work like this:

1. Select Alternative 2, 3, or 4 for Test 2.
2. Set an MW *de minimis* limit for each network flowgate.
3. Evaluate Original and Redirects according to *de minimis* policy. If Test 1 or Test 2 passes, determine the *de minimis* impact of that TSR.
4. Accumulate these *de minimis* impacts.
5. Stop accepting new *de minimis* impacts once the limit is reached for a given flowgate.

Example using Alternative 2 with 100MW Redirects and a 35MW *de minimis* limit for a given flowgate.

Redirect PUF	Parent PUF	Test 2 Ratio	De minimis Impact	Cumulative DM Impact	Result
.43	.35	0.81	8MW	8MW	Pass
.61	.52	0.85	9MW	17MW	Pass
.32	.27	0.84	5MW	22MW	Pass
.60	.50	0.83	10MW	32MW	Pass
.16	.20	.80	4MW	36MW	Fail

The 5<sup>th</sup> TSR is refused once the 35MW limit is reached, even though this Redirect does pass the *de minimis* criteria by itself.