

# Waiving Loss Return Obligations During Oversupply Conditions

August 22, 2017



# Topics

- Introductions
- Oversupply Conditions as of April 2017
- How Oversupply Management Protocol (OMP) is Billed
- History of Loss Waivers
- Loss Waiver Process
- Customer Proposal(s) for Volunteer Process
- Options to Avoid Mandatory Loss Obligation Waivers
- Summary and Next Steps

# Introductions

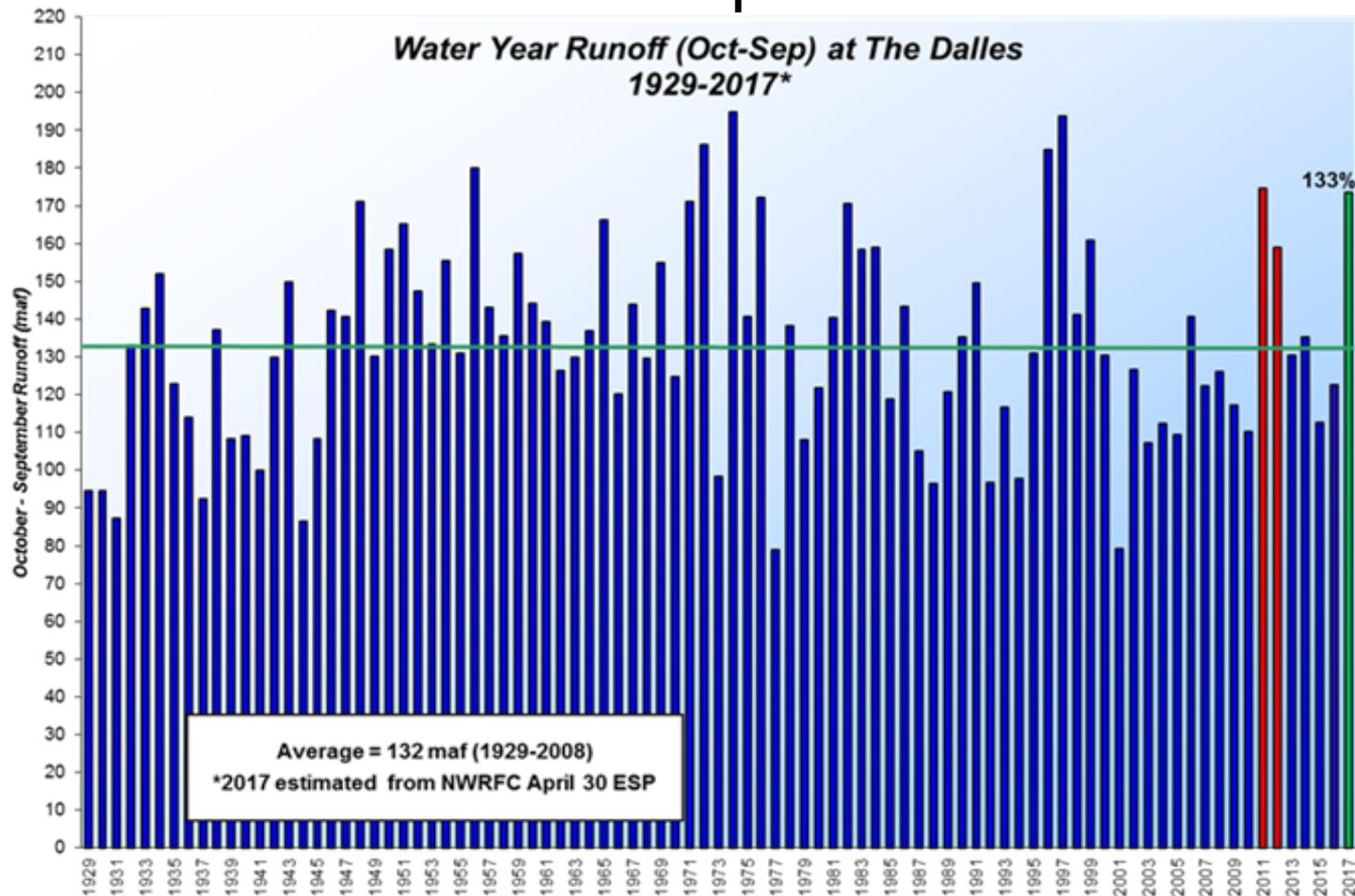
- **Scope:**
  - How BPA implements the waiver of loss return obligations during oversupply conditions.
- **Why are we here?**
  - BPA has received many comments on the process for how it waives loss return obligations.

# Introductions (continued)

## ■ BPA's Objectives

- Share what has been done in 2017, why, and how things have evolved.
- Discuss the loss waiver process.
- Gain an understanding of the barriers preventing customers from using the volunteer process.

# What Did the 2017 Oversupply Season Look Like in April?

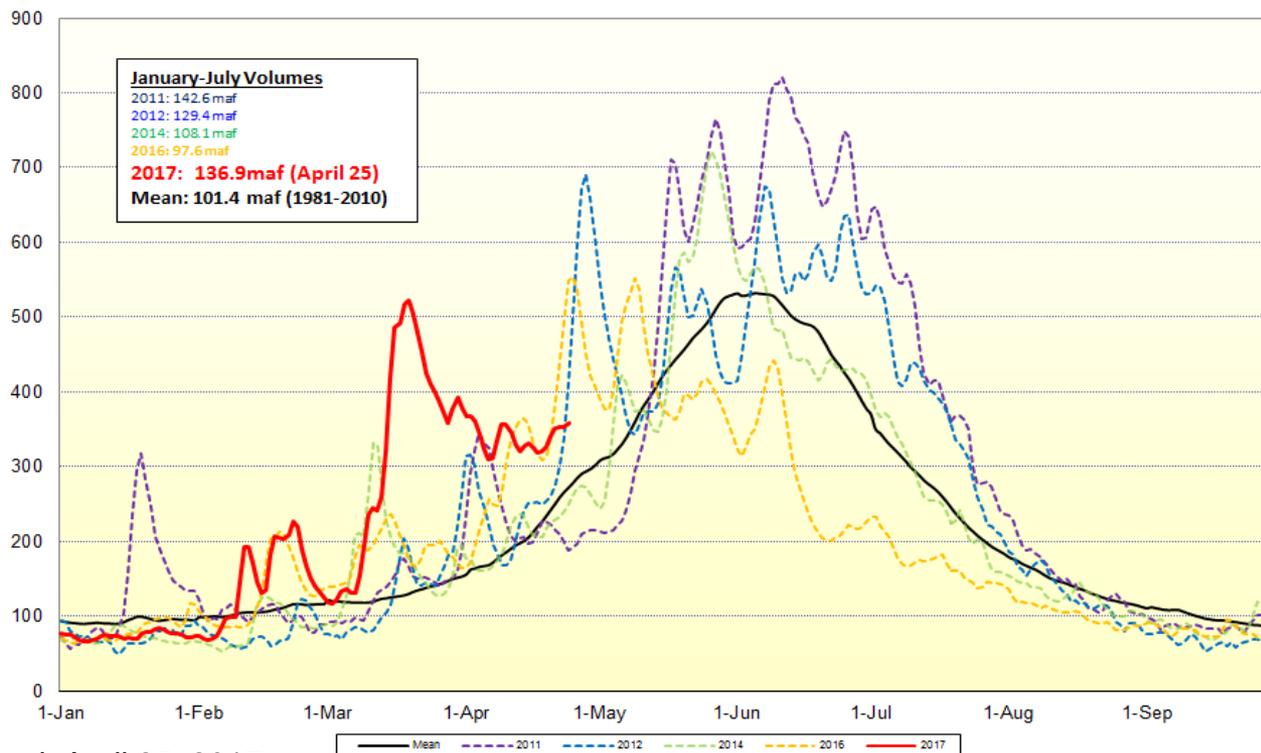


- 2017 data through April 30, 2017.
- Red Bars are the previous years there has been generator displacement.

# Contributing to the Oversupply Problem:

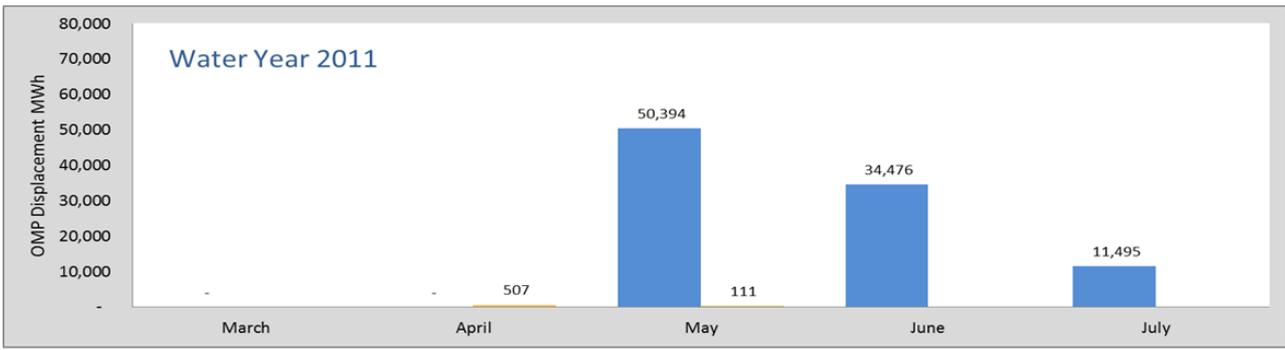
- Unprecedented increase in NW volume since February 1st – nearly 43 Maf!
- California installed over 9000 MW more of metered solar since 2012 and had an above average snowpack
- AC intertie was derated a few times for maintenance
- The runoff shape was early, which resulted in nearly 80 GW-hrs of OMP through April 25th.

Natural Flows Comparison at The Dalles

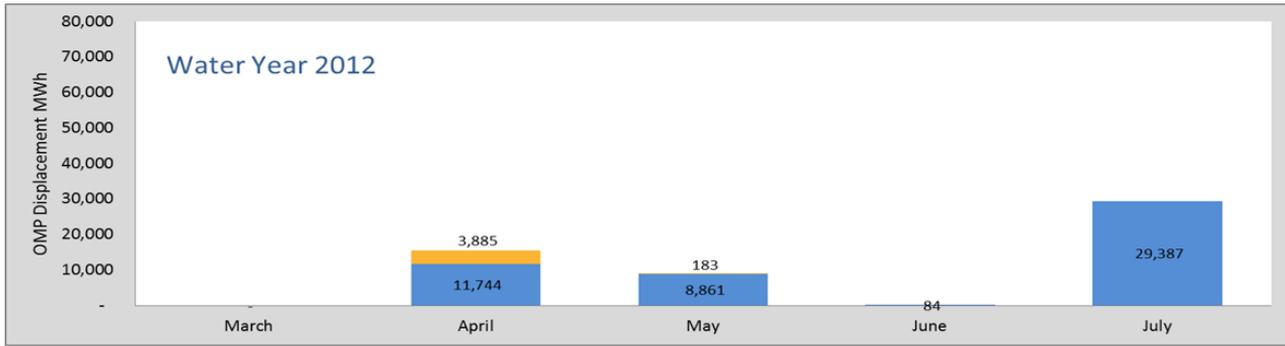


\* 2017 data through April 25, 2017.

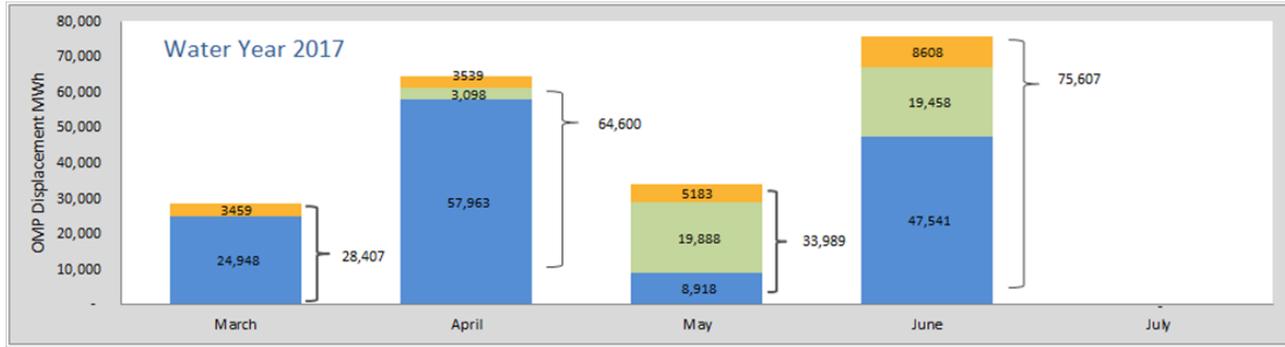
# 2017 Oversupply Management Protocol



2011 (MWh)  
 507 – Voluntary  
 95,858 – Displaced  
 96,365 – Total



2012 (MWh)  
 3,885 – Voluntary  
 50,076 – Displaced  
 53,961 – Total



2017 (MWh)  
 20,789 - Voluntary  
 42,444 - Mandatory\*  
 139,370 - Displaced  
 202,603 - Total

\*Implemented 4/28/17

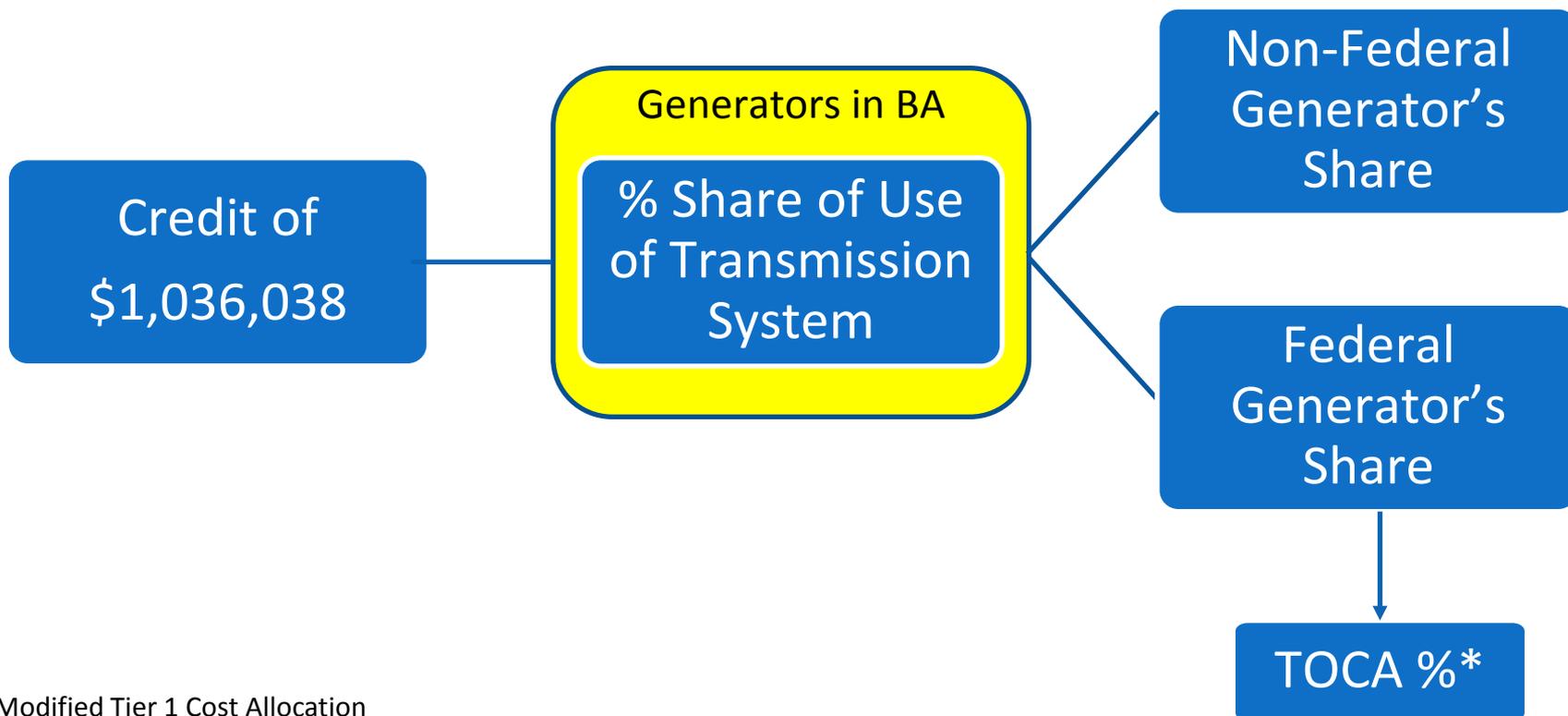
Voluntary Loss Waiver MWh Mandatory Loss Waiver MWh OMP Displacement MWh

# History of Waiving Loss Obligations

- Why is waiving loss return obligations an OMP tool?
  - Attachment P of the BPA Open Access Transmission Tariff describes the requirements and procedures for implementing OMP.
    - Section 1 lists a number of tools BPA may use to reduce or avoid the need for generator displacement.
    - Waiving real power loss return obligations is one of those tools.

# Less Displacement = Lower TDG and Lower OMP Costs

	Displacement MWh	Cost of Displacement	\$/MWh
Displacement With Loss Waivers	139,369	\$ 2,214,363	15.89
Displacement Without Loss Waivers	202,603	\$ 3,250,401	16.04
Difference	63,234	\$ 1,036,038	16.38



\*Modified Tier 1 Cost Allocation

# History of Waiving Loss Obligations

## ■ Volunteer Policy

- Prior to 2016, BPA relied solely on a volunteer process where resources contacted BPA to have their loss obligations waived during OMP conditions.
- In 2016, BPA stated it would proactively call generators to solicit loss return waiver volunteers.
- Heading into the 2017 season, BPA again evaluated the impact of the volunteer policy as a mitigating measure.

# Why Explore Mandatory Waiving of Loss Obligations?

	April						
	2011	2012	2013	2014	2015	2016	2017
Total Off-Peak Physical Losses (MWh)	76,344	101,664	100,146	100,660	96,875	85,341	92,849
Total On-Peak Physical Losses	116,495	130,730	146,528	142,030	143,057	177,422	178,124
	May						
	2011	2012	2013	2014	2015	2016	2017
Total Off-Peak Physical Losses (MWh)	88,974	115,248	105,303	114,172	97,322	131,416	100,145
Total On-Peak Physical Losses	112,794	153,749	144,451	146,198	125,175	157,552	188,417
	June						
	2011	2012	2013	2014	2015	2016	2017
Total Off-Peak Physical Losses	79,187	109,863	100,132	120,077	85,281	105,651	93,914
Total On-Peak Physical Losses	122,708	157,772	130,775	156,748	139,545	161,523	189,429
	See Notes below						
Volunteered Losses	2011	2012	2013	2014	2015	2016	2017
<b>Grand Total (MWh)</b>	<b>618</b>	<b>4,068</b>	<b>6,847</b>	<b>677</b>	<b>0</b>	<b>1,232</b>	<b>17,330</b>
<b>Volunteered % of Total Obligation</b>	<b>0.1%</b>	<b>0.5%</b>	<b>0.9%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>2.1%</b>

2011 – is for 6/23, 7/3, and 7/4

2012 – is for April and May

2013 – is for 5/17/13 to 5/20/13. There were no voluntary returns in June of 2013.

2014 – is for 6/3/14. There were no voluntary returns in May of 2014.

2015 – No voluntary returns waived in 2015.

2016 – is for 4/22/16 to 4/26/16. There were no voluntary returns in May or June of 2016.

2017 – is for April, May, and June. The March volunteers quantity was 3,459 MWh. The season total was 20,789 MWh.

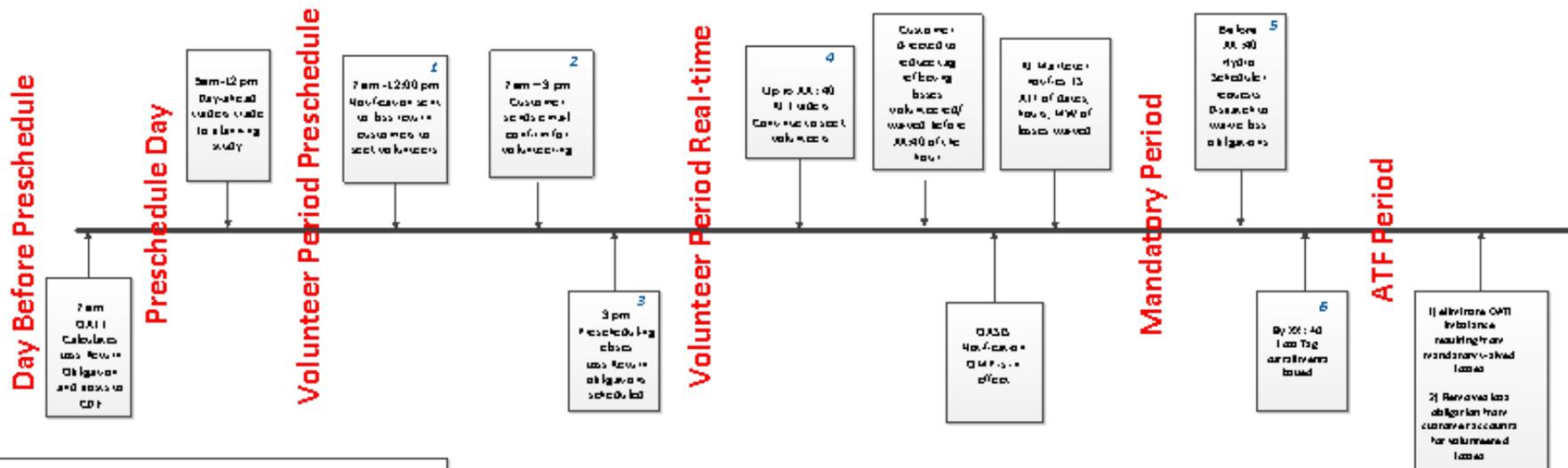
# 2017 Outreach and a Shortened Comment Period

- BPA met one-on-one with customers that made up over 80% of all in-kind real power loss returns.
- The OMP business practice was posted for comment on March 30. By then the 2017 oversupply season was well underway and had the potential to be severe (See slide 5 and slide 6).
  - Because of these conditions BPA needed to be fast and agile.
  - BPA used its standard process to change its business practice, although it shortened the comment period to fit the timeline.

# Loss Obligation Waiver Process

- What BPA took away from the initial customer outreach.
  - Seek volunteers as early as possible in the preschedule day.
  - Add a preschedule notification process to resources who elected to be loss waiver volunteers.
  - In the notification include specific date and hour or block of hours BPA is seeking volunteers.

# Loss Obligation Waiver Process (see handout)



- 1) Notification -Date & hours sent to Volunteer list
- 2) Customer & trader Negotiate & confirm Date/Hours/MW's waived
- 3) Loss legs continuing to flow could be mandatory waived in RT
- 4) Real-Time - additional Requests for volunteers
- 5) Hydro duty schedule is determined & placement is required -> notifies TX Dispatch to mandatory waive loss obligations (starts at top MW's)
- 6) Loss schedules are curtailed in full to the full hour

# Loss Obligation Waiver Process

- Evolution of the process since going live.
  - BPA's intent is to provide the volunteer notification as early in the preschedule day as possible (attempting to beat the 12 pm time in the business practice).
  - BPA has moved back the time that it initiates the mandatory waiver:
    - Prior to the flow of energy, to;
    - Prior to the close of the scheduling window at xx:40.
  - The current policy preserves BPA's ability to waive loss obligations should operational conditions change after the close of the scheduling window.

# Loss Obligation Waiver Process

- BPA has begun evaluating the establishment of a “no later than time” for mandatory waiver of loss obligations.
  - Risks to establishing a “no later than time”:
    - The market may still be actively trading.
    - Slice schedules are not in until xx:30; therefore, load requirements are not fully known.
    - Conditions may change after the established time causing displacement that could have been avoided.
  - What are customer thoughts?

# Current Options to Avoid Mandatory Loss Obligation Waivers

- Volunteer
- Elect Financial Returns
  - Loss return elections can be changed 4 times per fiscal year.
  - Election changes require a 60 day notice.
  - The energy price is the simple monthly average of Intercontinental Exchange (ICE) Mid-Columbia Electricity Price Index, Firm On Peak (excludes Sundays and NERC holidays) plus 15%.

# How Can BPA Improve the Process?

- How can BPA increase volunteer participation?
  - What is not working with the volunteer process?
- Customer proposals for the volunteer process?

# Summary and Next Steps

- Recap of key takeaways
- Please provide additional comments by September 22, 2017.
  - Email to [techforum@bpa.gov](mailto:techforum@bpa.gov)
- BPA will host a follow up conference call in early December 2017