



B o n n e v i l l e P o w e r A d m i n i s t r a t i o n



Federal Regional Energy Update / Columbia River Treaty

Greg Delwiche

Energy Northwest Members Forum

October 24, 2013

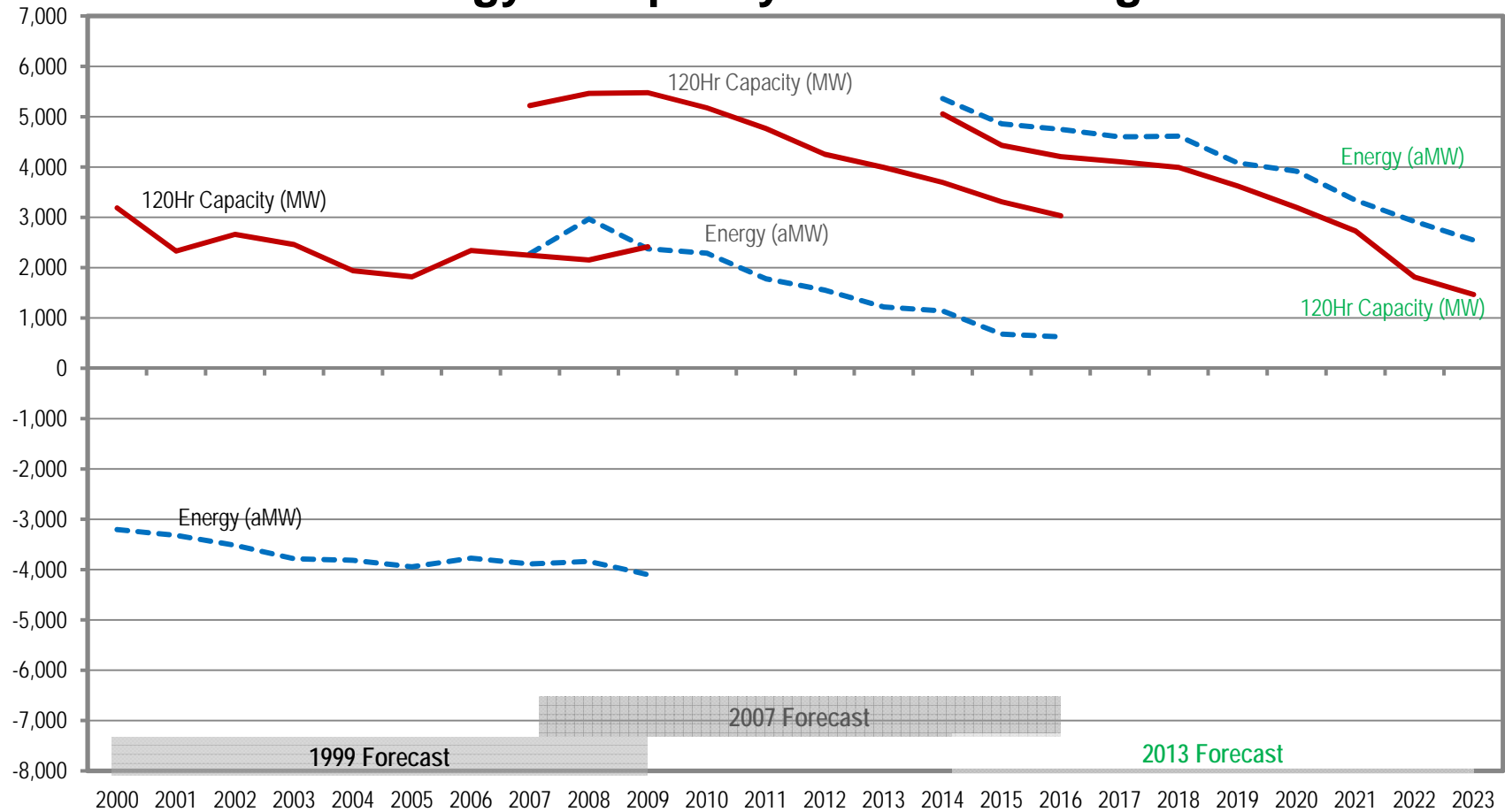


# Regional Resource Adequacy





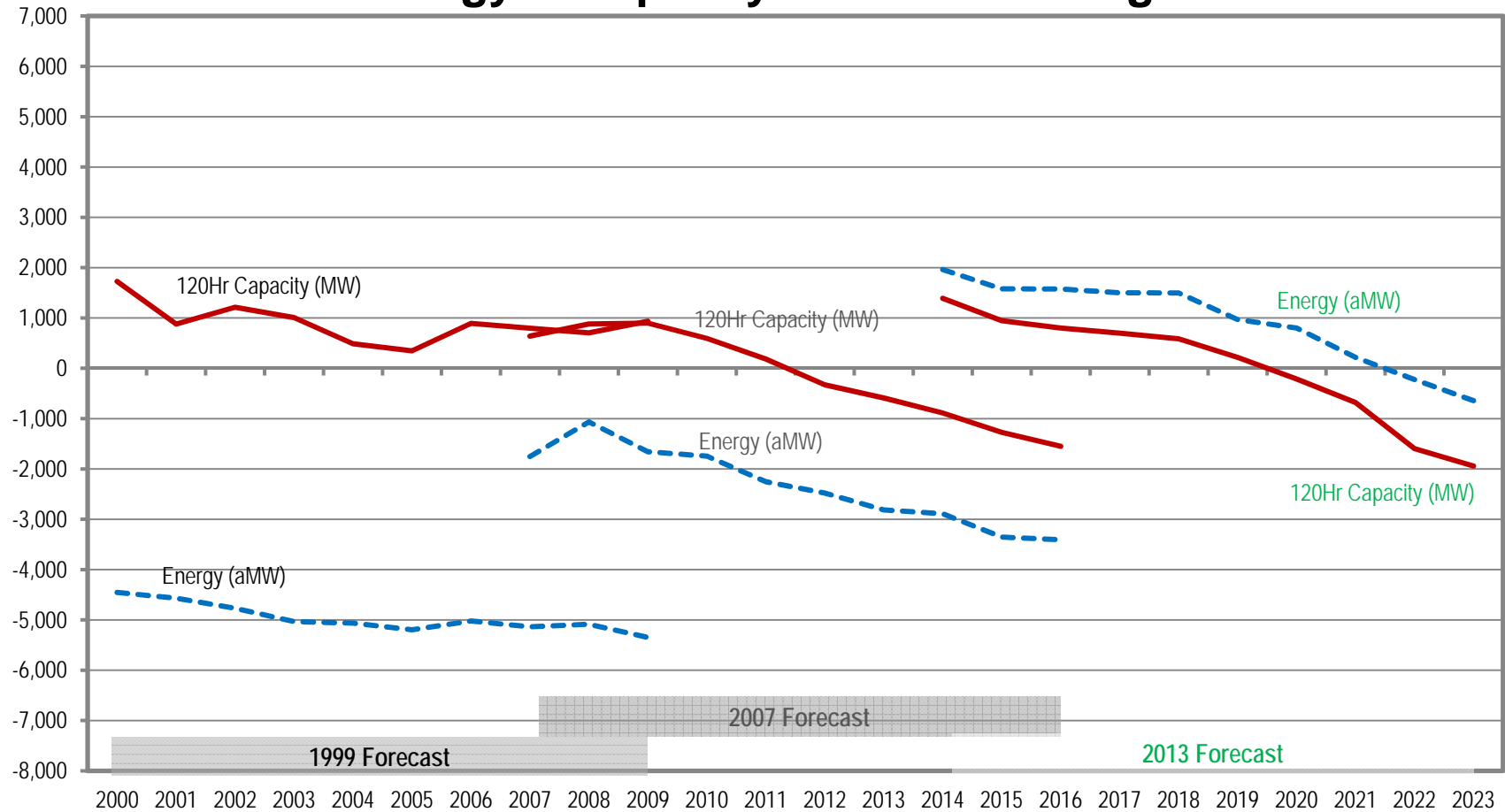
## Pacific Northwest Energy & Capacity: A New Paradigm



Source: BPA White Book, Regional Surplus/Deficit Forecasts under 1937 Water Conditions, 100% IPP



## Pacific Northwest Energy & Capacity – A New Paradigm

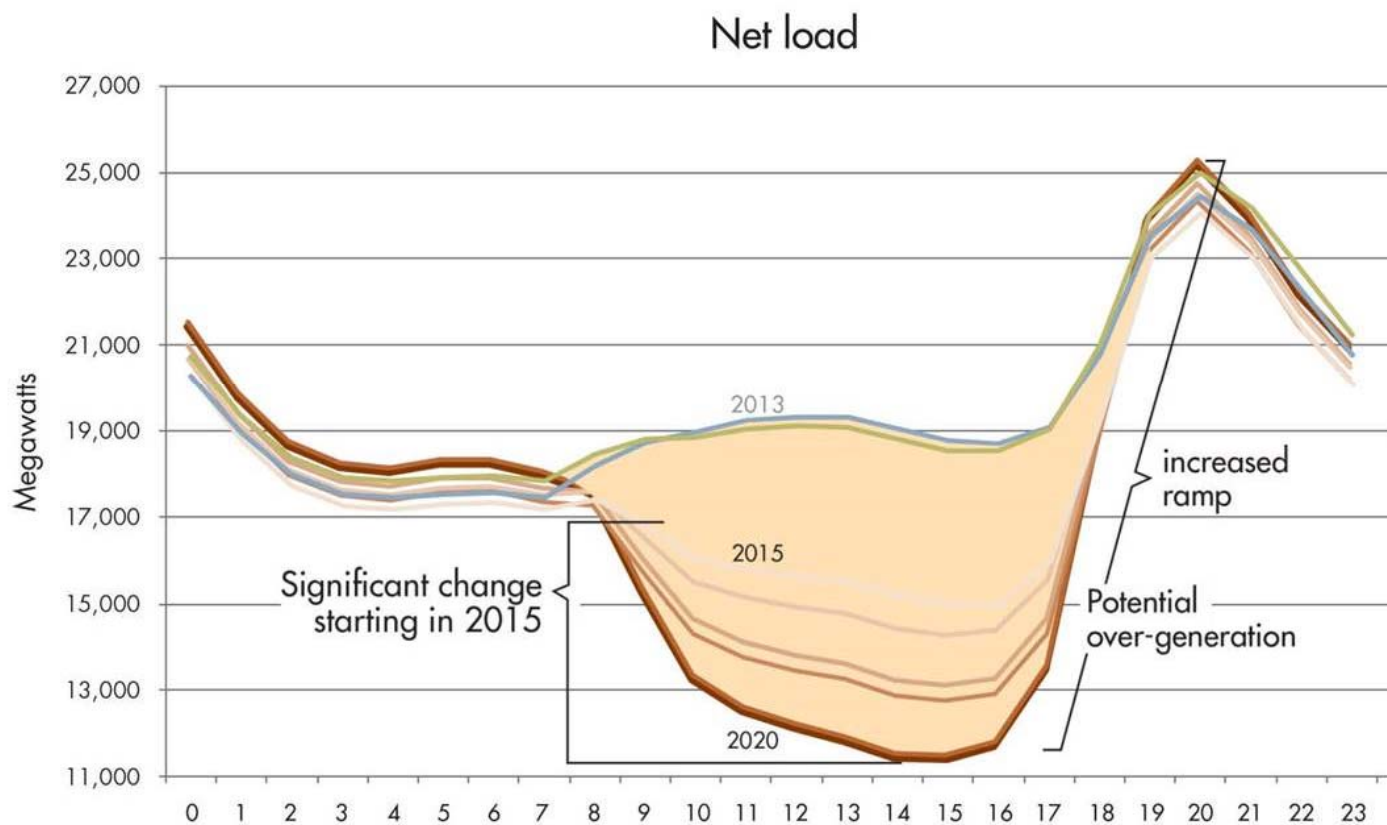


Source: BPA White Book, Regional Surplus/Deficit Forecasts under 1937 Water Conditions, No IPP





## Growing need for flexibility starting 2015





## Regional Market Development Discussions

Two major regional efforts:

PacifiCorp has decided to become a market entity within the CISO and is working with stakeholders.

Many other Northwest entities are participating in a discussion about market development steps the region may take. Current discussion is focused on phased development, including:

- Enhancing regional infrastructure and data sharing to improve transmission system state awareness and transparency
- Ensuring operating hour resource sufficiency
- Developing bilateral capacity transaction capability
- Considering whether to implement a NW region Security Constrained Economic Dispatch (SCED)/Energy Imbalance Market (EIM).
- Development of a governance proposal for potential formation of a Northwest Energy Imbalance Market.


Work plans and decision points are being developed for executive review



# 2014-2016 Region Project Timeline

	2014	2015	2016	Q1
NWPP MC Phase 3	Regional Infrastructure Upgrades			
NWPP MC Phase 4		Resource Sufficiency		
NWPP MC Phase 5	SCED RFP	SCED/EIM Program Implementation		
CAISO EIM	New Entity Opt In		New Entity Go Live	
	PacifiCorp Go Live			
BPA Initiatives	30-min Intra-hour	15-min Intra-hour	STAR AFC Project	
	Short-Term Comp ↔ Limit Hourly Sales			
RC Initiatives	ECC Go Live			
	Next Day Planning other flow-based tools			

 = Internal Decision Points / Off-Ramps

 = External Milestones



# Columbia River Treaty Review

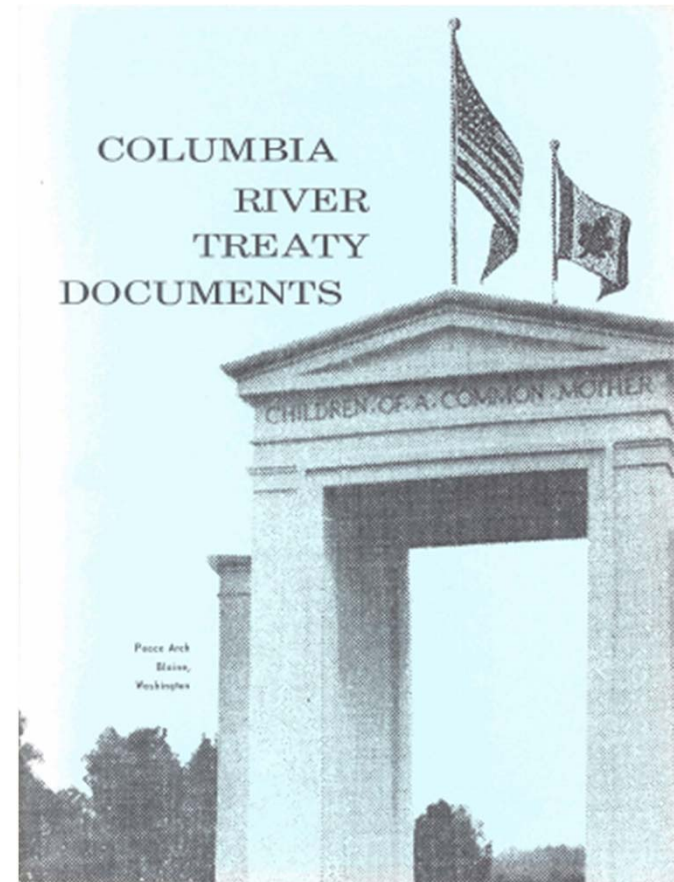






# Why conduct a review of the Treaty now?

- The Treaty has no specified end date; however, either nation can terminate most of the provisions of the Treaty as early as Sept 2024, with a minimum 10 years' written notice (Sept 2014).
- U.S. must deliver electric power to Canada equal to one-half the estimated U.S. power benefits (Canadian Entitlement) from the operation of Canadian Treaty storage, currently worth about \$250-\$350 million annually.
- Current value of coordinated operations is much lower than calculated payment under Treaty protocols.
- Current assured annual flood control operating procedures will end in 2024, independent of the Treaty termination decision.





# Key Points in Draft Recommendations

- The U.S. Entity released its draft Treaty recommendation on September 20.
- The recommendation is available for public review and comment through October 25, 2013.
- The draft recommendation identified the method for calculating Canadian Entitlement, as outdated and no longer equitable.
- The recommendation calls for the benefits to be one-half of the actual value of coordinated operations.
- The draft recommendation states that the ecosystem function should be a third primary purpose of the Treaty.
- Inclusion of ecosystem-based functions in the Treaty is not intended to prevent the region from achieving its objective of reducing U.S. power costs. Funding for additional ecosystem-based function operations is recommended to come from a rebalancing of the power benefits.



## Draft Key Issues

### Flood Risk Management (FRM)

- “Called Upon” FRM occurs post-2024 with or without the Treaty
- Canada and the US interpretations differ
- Some U.S. reservoirs in the Pacific NW may have to be operated differently for flood control post-2024
- Some US ecosystem interests believe current FRM protection is too conservative and should be modified to allow more water to be shifted into spring period flows
- COE has stated that they do not have the authority to increase flood risk in the Basin; and, the CRTR is not the right forum to address such changes
- US Entity proposed a domestic process to address FRM for the Basin



## Power

### Canadian Entitlement Return

- With Treaty termination, the U.S. retains a significant amount of hydro power. But, planned coordinated operations to optimize hydro power production would end
- US Perspective: Coordinated power operations with Canada under the Treaty are far less valuable than the payment formula presently requires
- Pacific NW power interests making this Treaty payment want it to reflect actual benefits

### Ecosystem Operations Trade-offs

- Some US interests are proposing to reduce the winter power drafts to allow higher spring releases to create a more natural hydrograph
- Reductions in winter power drafts could substantially reduce hydro power generation in both Canada and the US during winter peak load periods
- This could impact regional power reliability, electric power rates, and the regional economy



## Ecosystem

- The Working Draft recommended that ecosystem operations be incorporated in the Treaty as third primary purpose with power and FRM
- There is significant opposition for this potential change from some regional stakeholders
- Some regional interests are advocating a more natural hydrograph by shifting volumes of water releases from winter to spring
- Other parties are advocating recognition of the present balance of regional water management and uses developed over the past 20-25 years
- Some interests believe that fisheries mitigation and recovery are being adequately addressed in domestic processes
- There seems to be broad support for an adaptable post 2024 CRT regarding Climate Change and Basin FRM policies
- There is not agreement on whether or how aggressively to pursue an assessment of fish passage feasibility at Grand Coulee Dam





## Water Supply

- Some parties are interested in being able use portions of any water shifted into spring and summer periods to meet out-of-stream (irrigation and M&I) needs
- Other parties view is that any water shifted to spring and summer remain in-stream until all ecosystem objectives are fully met
- US Entity has proposed a domestic process to address allocation

## Negotiation Participation

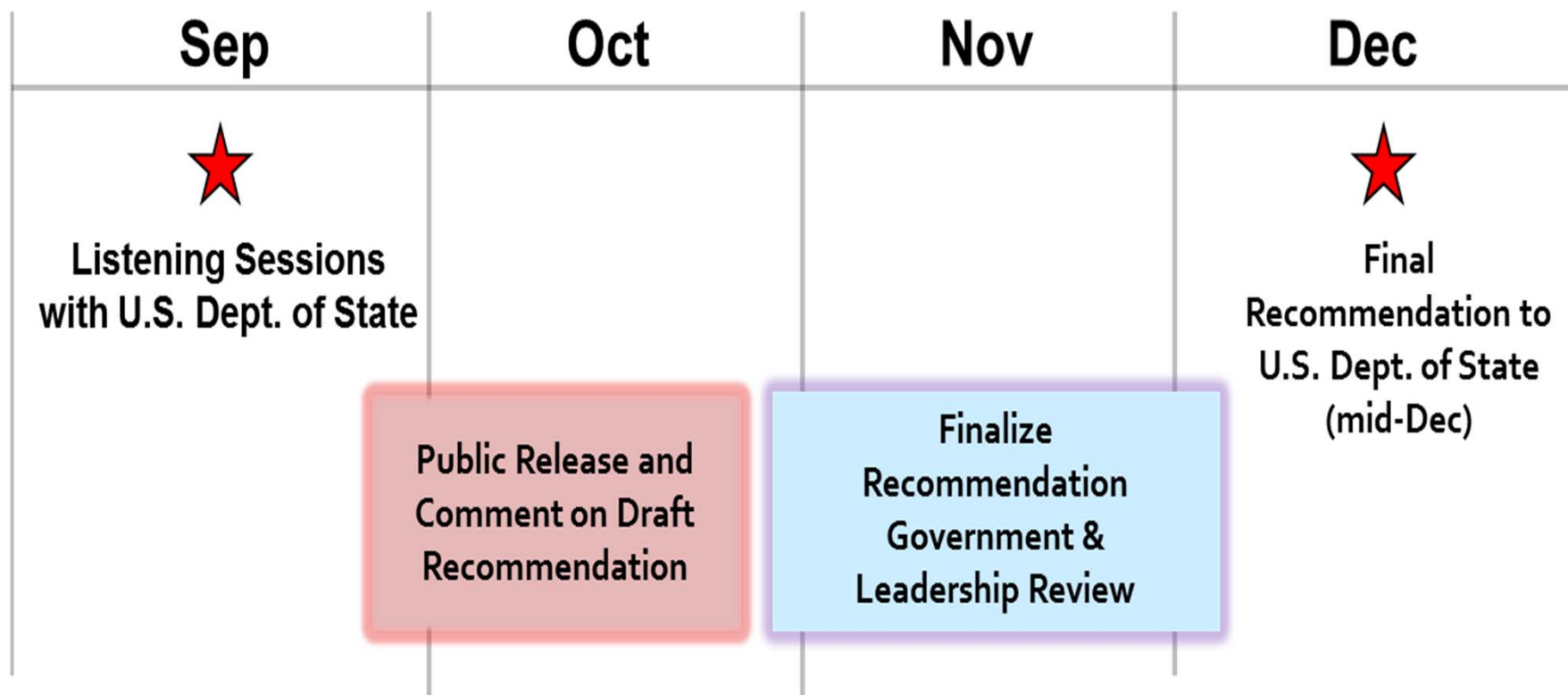
- Essentially all sovereigns and key stakeholders have strongly argued for a “seat at the table” based on vested interest
- The US Entity has proposed a “domestic advisory mechanism” to allow ongoing consultation with regional interests

## US Entity Composition

- Some Sovereigns have advocated for changes in the US Entity



## Current Timeline Regional Recommendation Development and Review 2013





# Questions?