

# ColumbiaGrid Planning Under Order 1000: Subregional and Interregional Collaboration

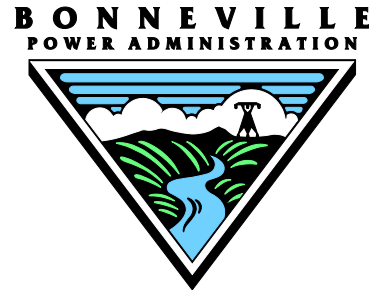
HARVARD ELECTRICITY POLICY GROUP  
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# Members and Participants





# ColumbiaGrid Planning

- Independent staff of twelve – six devoted to planning
- Independent 3 member Board:
  - Ed Sienkiewicz, Shelly Richardson, and Jim Miller
- Anyone can participate - Open stakeholder process
- Planning and Expansion Function Agreement (“PEFA”)
  - Develop Biennial Transmission Expansion Plan which builds on an annual System Assessment
  - Conducts studies focused on specific issues (e.g., Puget Sound area plan, Mid-Columbia Area Plan, Centralia closure, wind integration, cross-Cascades)
- Independent staff makes cost allocation recommendation to participants; independent board decides disputes; FERC provides ultimate backstop under PEFA

# PEFA Network

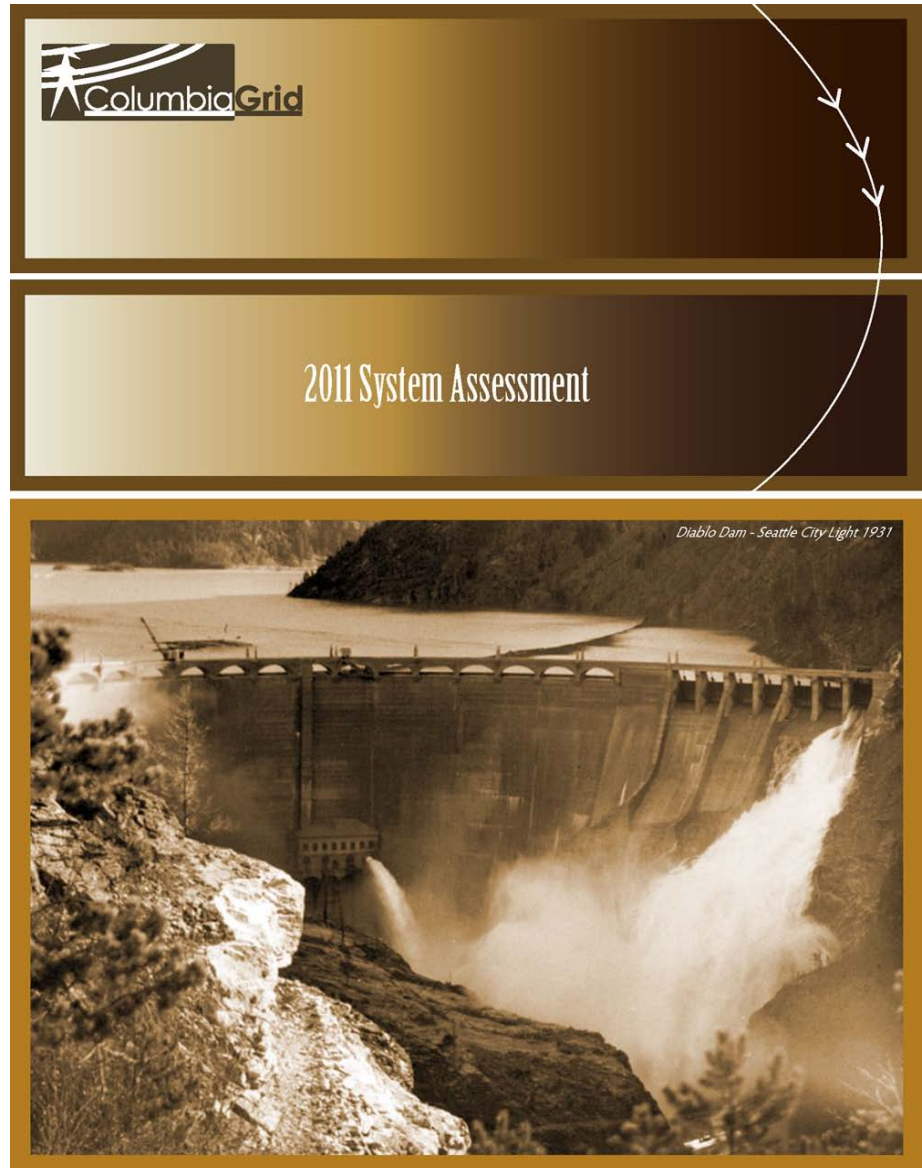


# System Assessments

Completed each year  
to assess the system's  
ability to meet  
NERC TPL requirements

Normally available  
each year in July

See [www.columbiagrid.org](http://www.columbiagrid.org)







Public Review Draft

2011 Biennial Transmission  
Expansion Plan



## **Biennial Plans**

Completed every other  
year with updates  
in the off years

Normally a final draft is  
available in December  
with Board consideration  
in February

See [www.columbiagrid.org](http://www.columbiagrid.org)



# Planning and Expansion Project Types Under PEFA

ColumbiaGrid's PEFA authorizes independent transmission planning on a single-utility basis for participants' interconnected network, including:

- Existing Obligation Projects
- Requested Service Projects
- Capacity Increase Projects
- Single System Projects
- Expanded Scope Projects



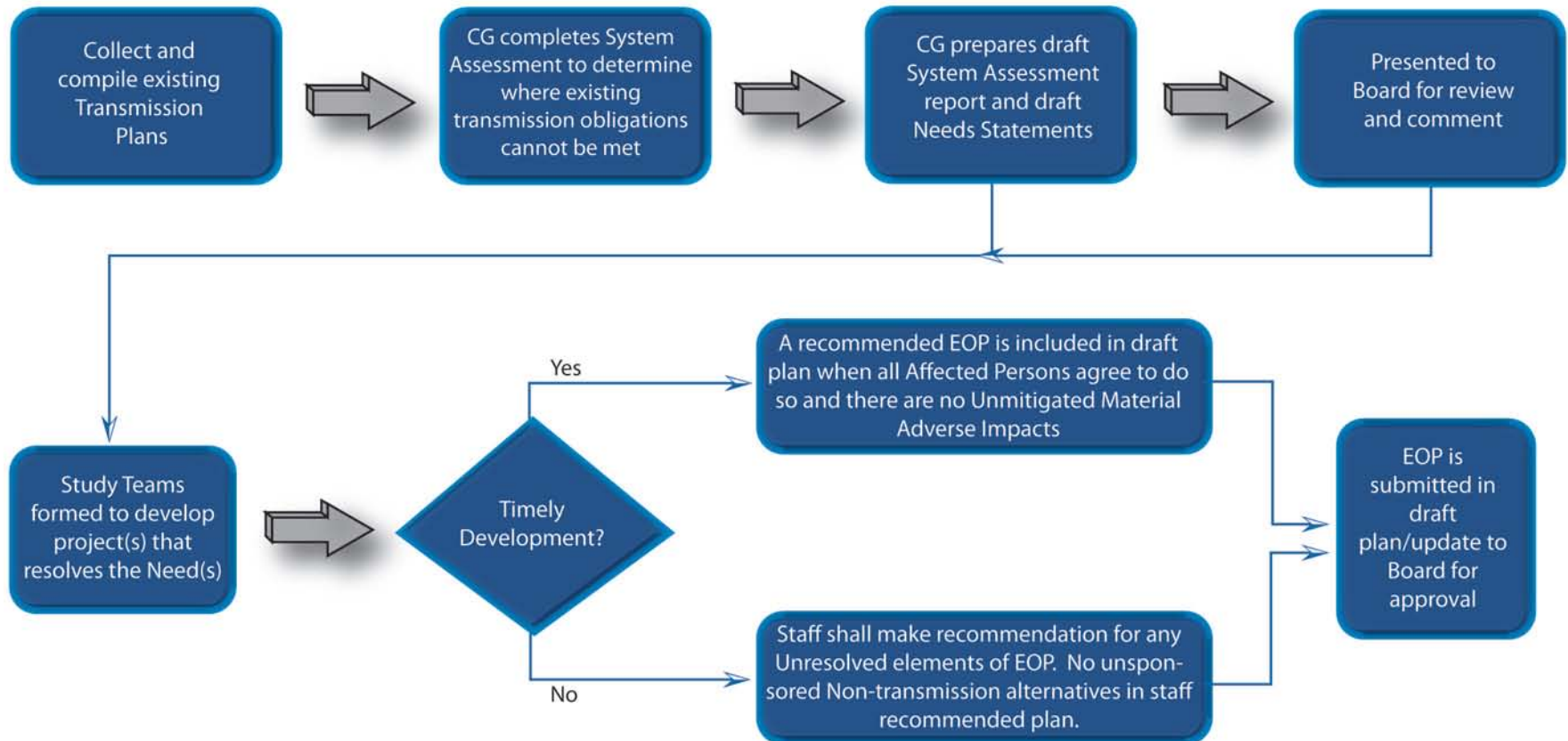
# ColumbiaGrid Role in Cost Allocation

	Existing Obligation Project	Requested Service Project	Capacity Increase Project	Expanded Scope Project	Single System Project
ColumbiaGrid Staff develops cost allocation recommendation among TOPP's if Affected Persons cannot reach agreement.	X	X			
ColumbiaGrid can allocate costs to another TOPP based on the ability of the project to meet a Need on a TOPP's system. The amount allocated may not exceed the cost that the TOPP would have occurred if it had met that Need with its own project. No other project benefits may be considered (e.g., a decrease in losses)	X	X			
ColumbiaGrid develops a cost allocation if requested by a Planning Party			X		
ColumbiaGrid is free to consider all impacts and benefits from the project in developing the cost allocation			X		

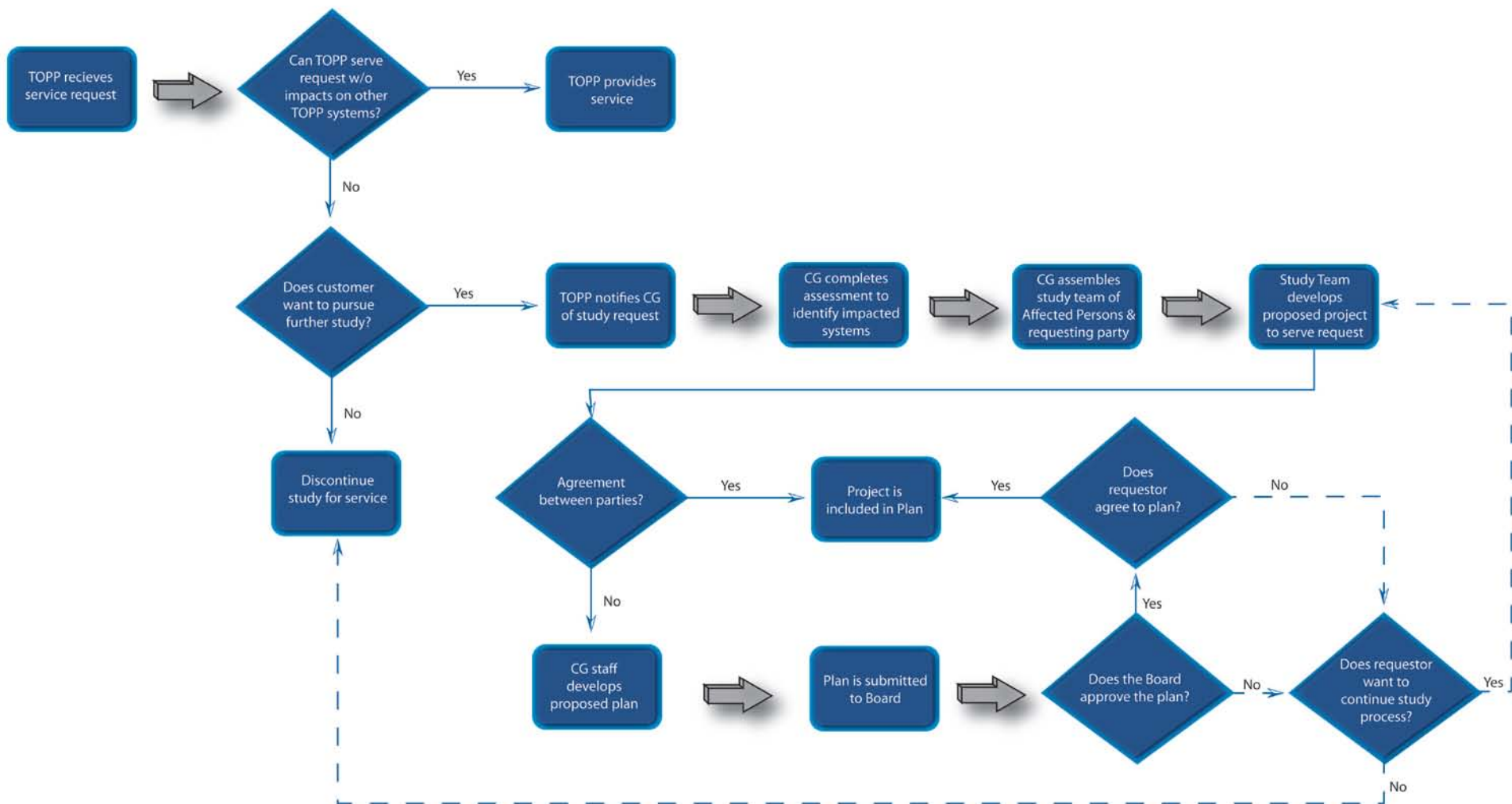




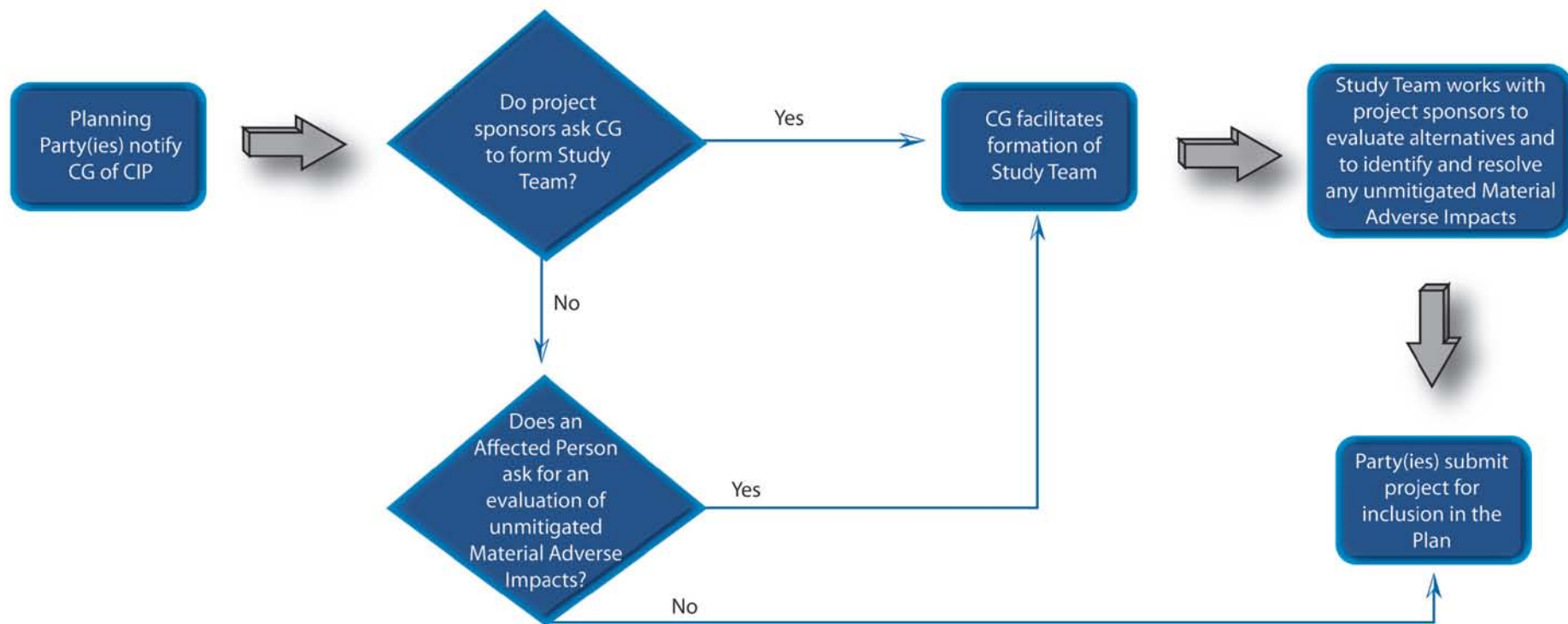
# Existing Obligation Project



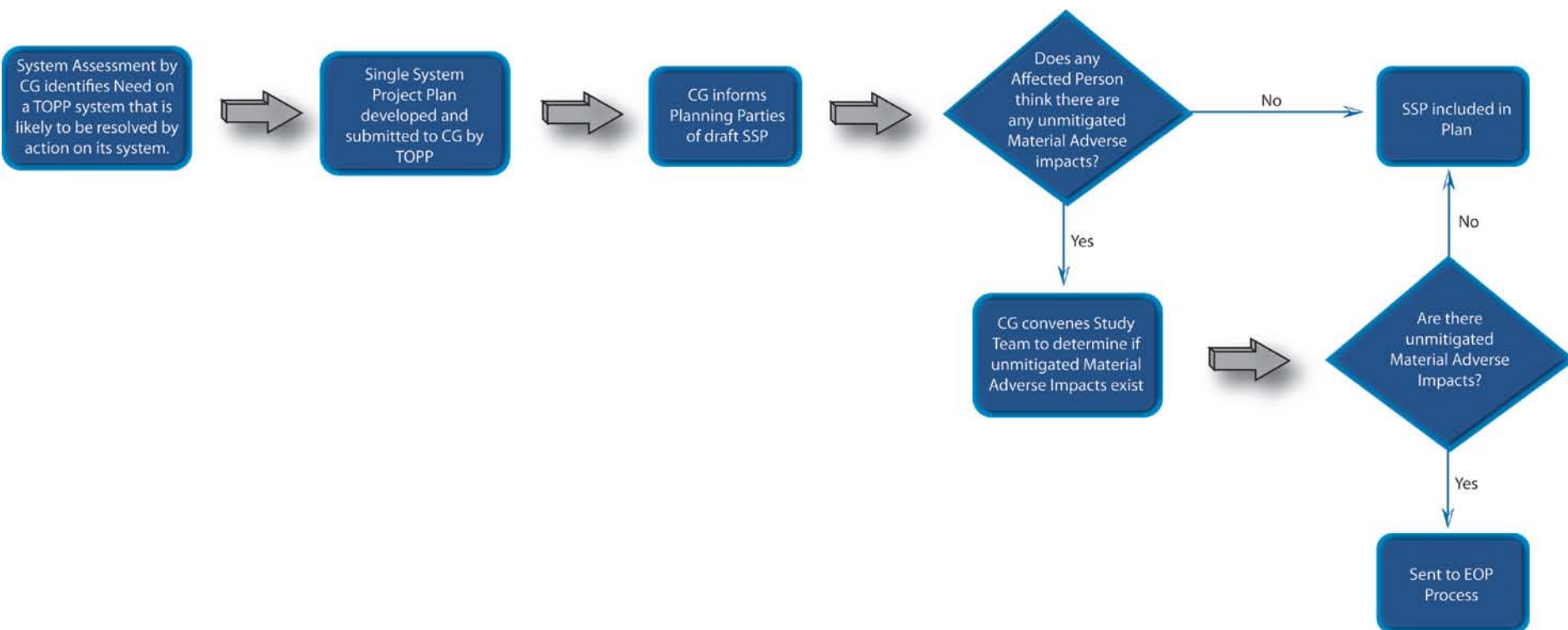
# Requested Service Project



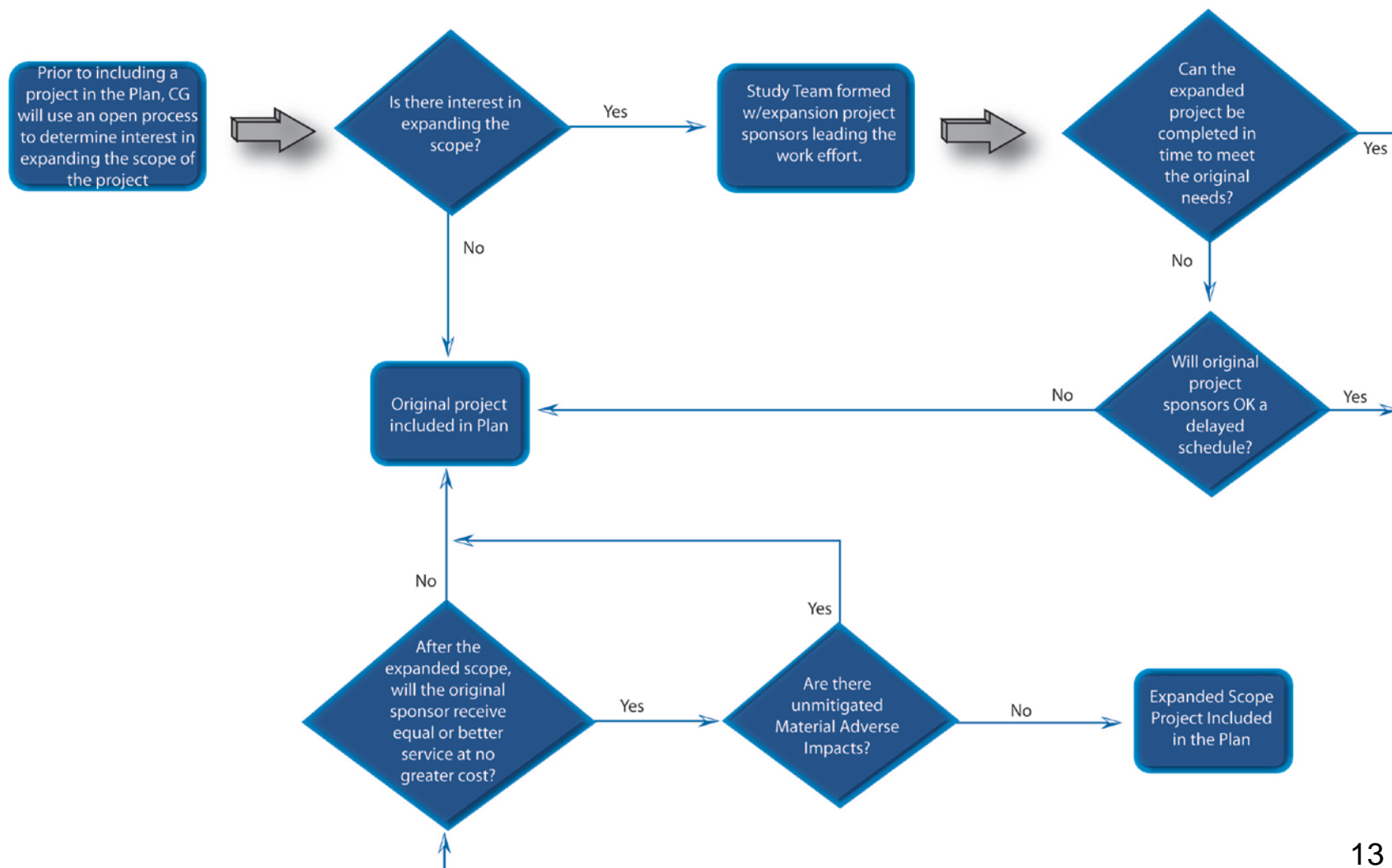
# Capacity Increase Project



# Single System Project



# Expanded Scope Project



Board Actions	Recommended Existing Obligation Project	Staff Recommended Existing Obligation Project	Recommended Requested Service Project	Staff Recommended Requested Service Project	Capacity Increase Project	Expanded Scope Project	Single System Project
Finding of no unmitigated Material Adverse Impacts	May approve Study Team finding	May approve Study Team or Staff finding	May approve Study Team finding	May approve Study Team or Staff finding	Note impacts, which are left for WECC process to resolve	May approve Study Team finding	
Cost allocation if Affected Persons do not agree		May approve Study Team or Staff finding		May recommend allocation			
Project meets Need	May approve Study Team finding	May approve Study Team or Staff finding					
Project serves transmission service request			May approve Study Team finding	May approve Study Team or Staff finding			
Project meets underlying Need or request without higher cost than original project						May approve Study Team finding	
Transmission allocation		May approve Study Team or Staff finding		May approve Study Team or Staff finding			
Plan of Service		May approve Study Team or Staff finding		May approve Study Team or Staff finding			
Sponsorship		May approve Study Team or Staff finding		May approve Study Team or Staff finding			
Schedule		May approve Study Team or Staff finding					
Items Board may modify if supported by record		Cost allocation or transmission allocation		Cost allocation or transmission allocation			





# Planning and Expansion Agreement Benefits

- Coordinated and collaborative open planning process
- Transparency of data and methodologies
- Independent facilitation, studies, and review
- Enhanced ability to integrate renewable resources across multiple transmission systems
- Mechanism to encourage FERC to take action should entities not voluntarily construct needed projects



# Interregional Planning

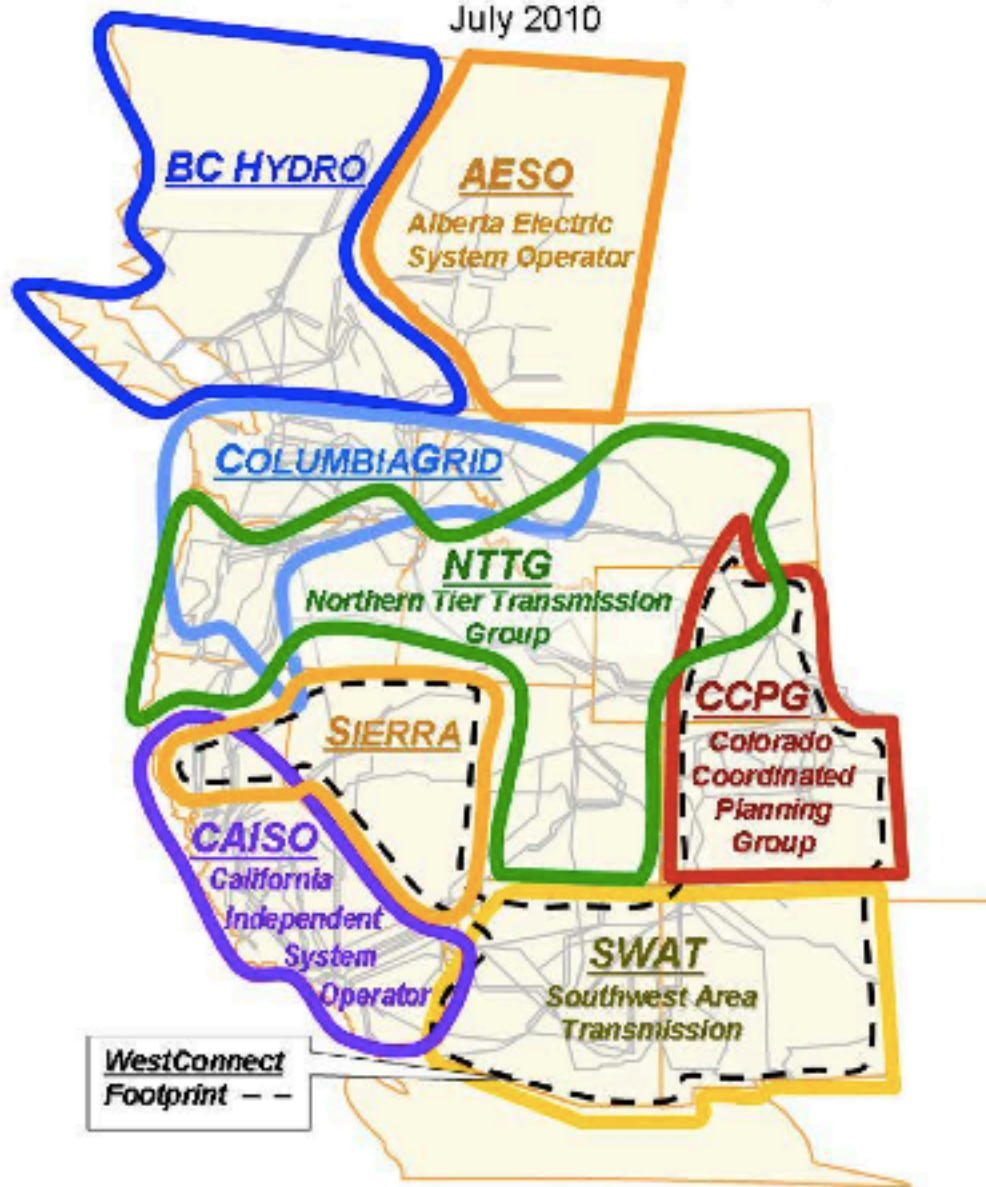
- Interconnections originally designed for localized power exchanges, now integral to reliable operation in other areas
  - Interconnections among adjacent utilities historically were implemented to facilitate business transactions
  - Such interconnections collectively formed a complex, massive, almost organic operating system
  - Today, the “independence” of any given interconnection is increasingly at issue
  - Incidents on any single system element are widely felt



## Interregional Planning, cont.

- Pacific Northwest's historical continuum of transmission coordination – not isolated events
  - Pattern of connecting, then pulling away: NRTA, WRTA, IndeGo, RTO West, Grid West
- Contemporary context: WECC is the FPA “Regional Entity” in the western interconnection
- Establishment of eight “sub regional” planning and coordination groups: ColumbiaGrid, Northern Tier Transmission Group, WestConnect, others:

Western Interconnection  
Sub-Regional Planning Groups (SPGs)  
July 2010



# Subregional Planning Groups



# WECC Initiatives

- Subregional Planning Coordination Group
- Regional Transmission Expansion Planning Project: expand the depth and breadth of WECC's existing regional transmission planning processes:
  - Create multi-constituency steering group
  - 10 year regional transmission plan
  - Acquire new long-term planning tools
  - Create educational materials



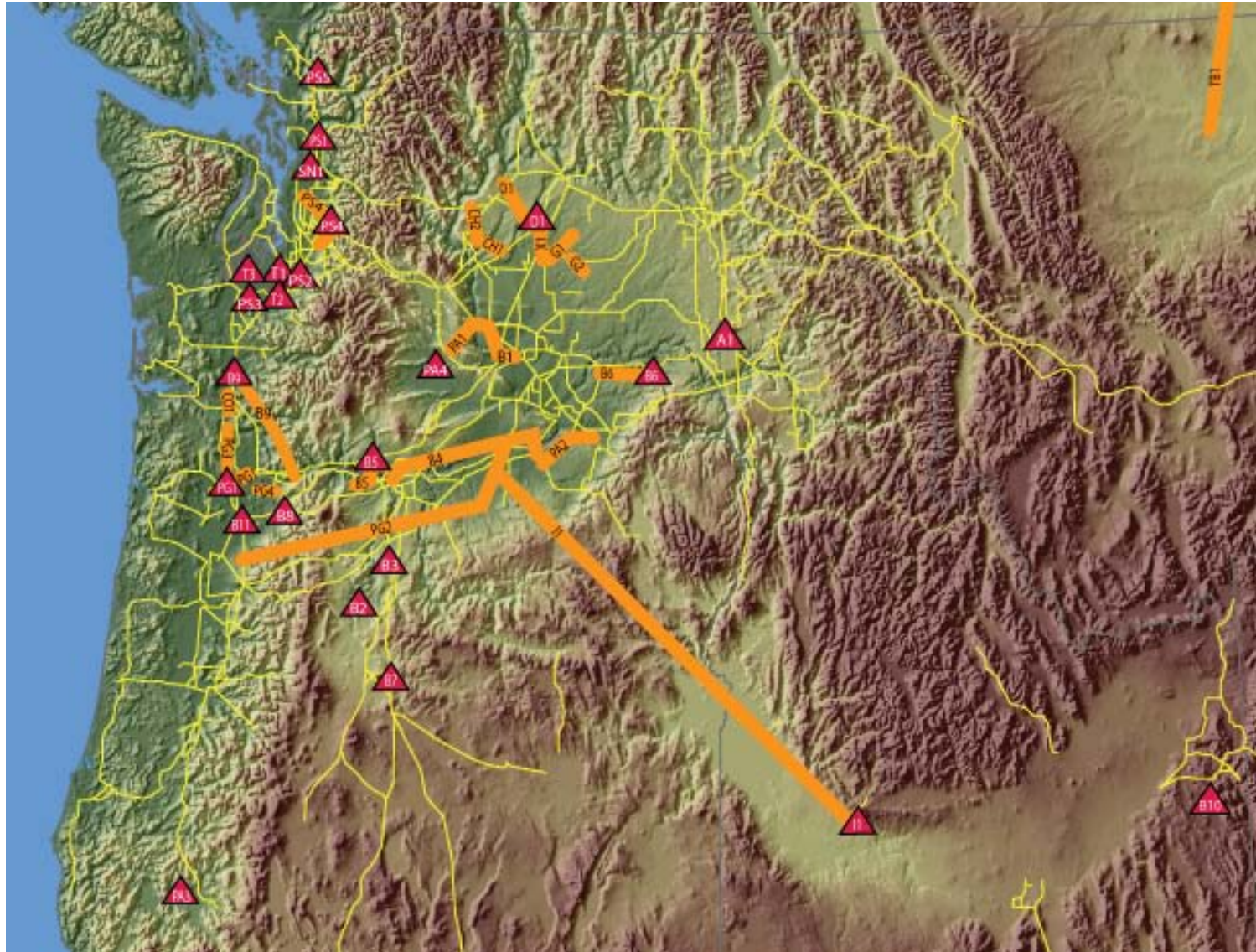
# WECC Initiatives, cont.

10 Year Plan will not include:

- Quantification of impacts to specific ratepayers
- Selection of preferred projects to build
- Cost allocation of projects
- Permitting/siting of projects



# Ten-Year Plan





# Major Transmission Projects

