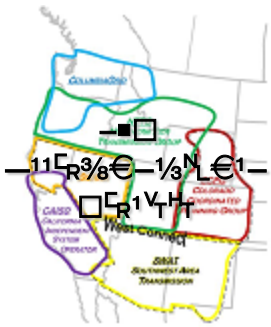


Current Sub-Regional Planning Groups and Processes

Rich Bayless
Northern Tier Transmission Group

Robert Kondziolka
WestConnect

CREPC Meeting
Phoenix, Arizona
November 5, 2009



Transmission Provider Obligations

- Obligation to provide comparable service via OATT Tariff
- Reliability Performance complying with Standards
- Transmission Planning Process Obligations – FERC Order 890 Attachment K: TPs must have a planning process that complies with the 9 principles of Order 890
 - a) Coordination
 - b) Openness
 - c) Transparency
 - d) Information Exchange
 - e) Comparability
 - f) Dispute Resolution
 - g) Regional Participation
 - h) Congestion Study
 - i) Cost Allocation



Regional Planning Requirements

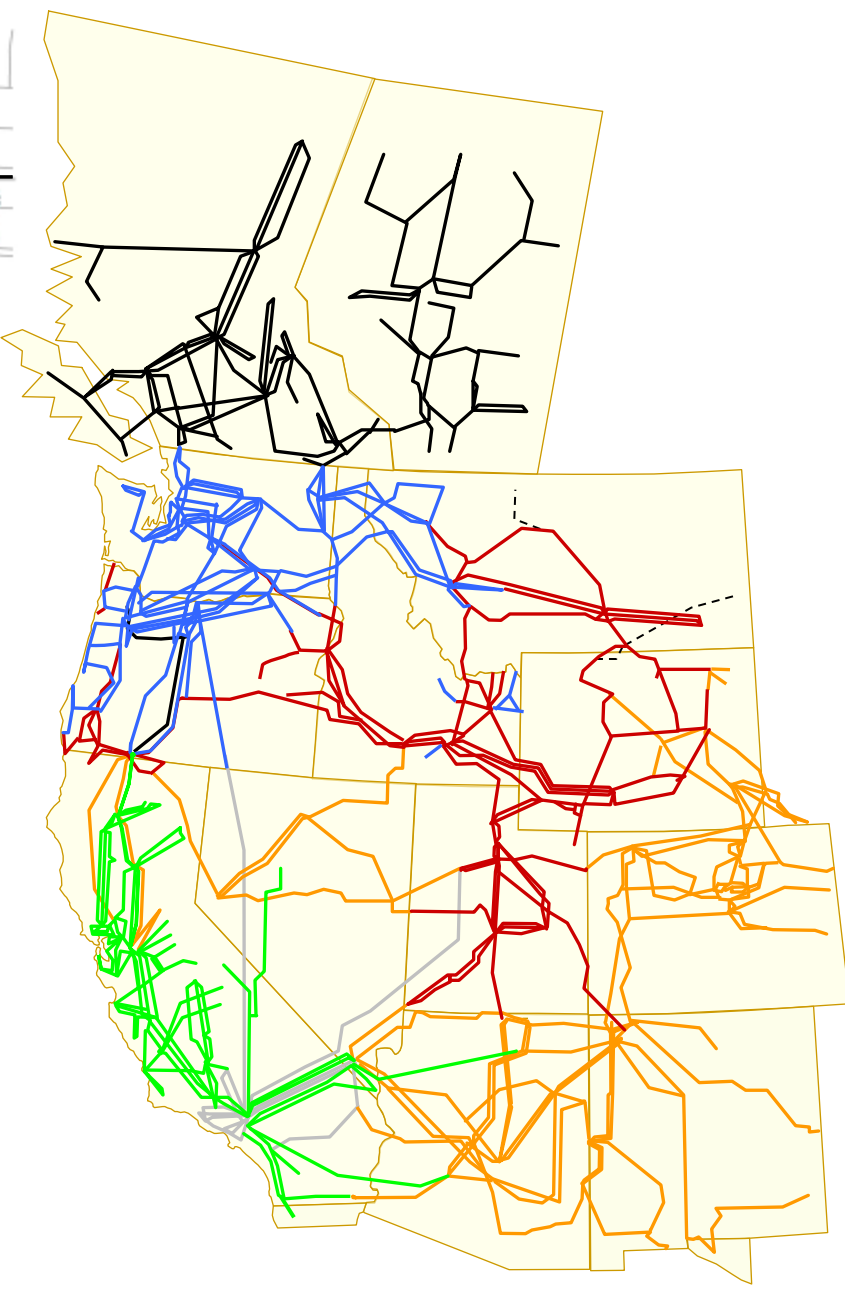
What SPGs Do Now

– Principle G: Regional Participation –

- Utilizing existing institutions & processes
 - Sub-Regional Planning Groups
 - WECC Regional Planning
 - Coordination with other Sub-Regional Planning Groups
- Synchronizing regional & sub-regional planning processes
 - Cycles, requirements & obligations
 - With local Planning Process & Attachment K
- SPG Member's obligations defined under agreements
 - Attachment K
 - Planning Agreements & Charters
- TP's & SPGs obligations to WECC defined in WECC Membership Agreements, Bylaws, & Protocols
- Subsequent Compliance Orders clarify that Regional and Sub-Regional Planning processes are to:
 - Allow stakeholders and others to bring alternatives (with comparable planning data)
 - Identify and Select best alternative

– Principle H: Economic Planning Studies

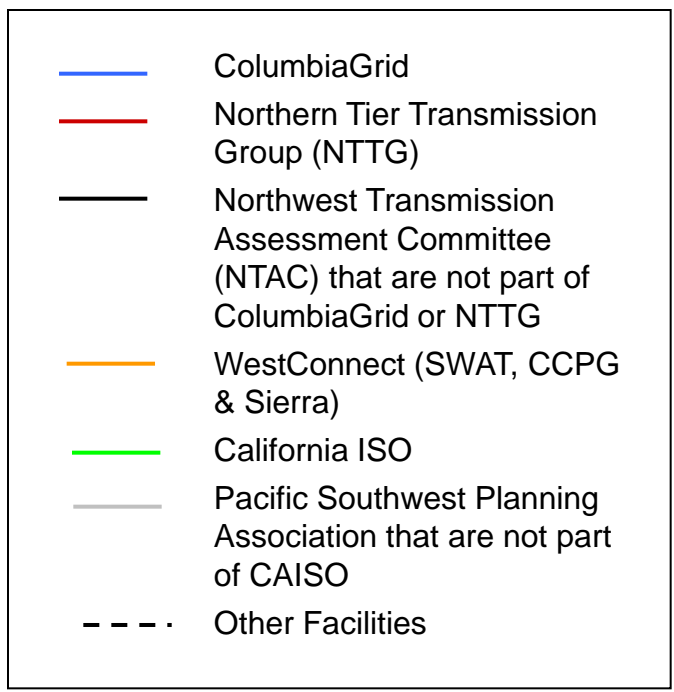
- TP's must perform or have performed for stakeholder requests
- If customer/stakeholder requests effect other systems forward to SPG
 - SPG aggregates requests, submits, then prioritizes with WECC TEPPC for study in TEPPC or SPG work plan
 - If regional or sub-regional priority, TEPPC or SPG performs economic study (up to annual limits).
 - If not high enough priority, TP and customer arrange to perform if required
- TP Member's obligations defined under agreements
 - Attachment K
 - Planning Agreement & Planning Charter
- TP's & SPG obligations to WECC defined in WECC Membership Agreements & TEPPC Protocols



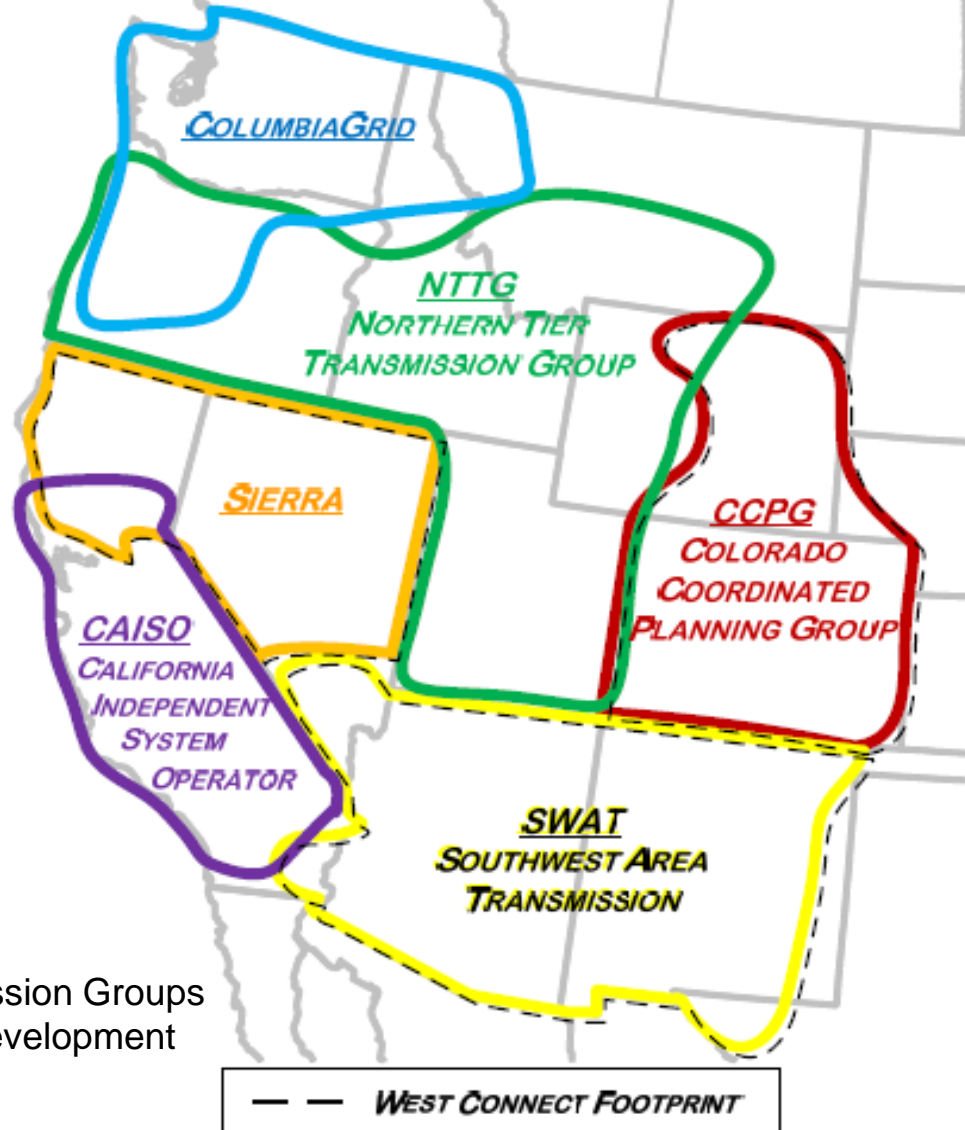
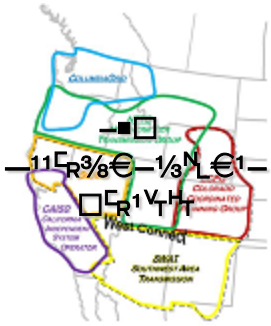
WECC

Subregional Planning Groups

Major Transmission Facilities

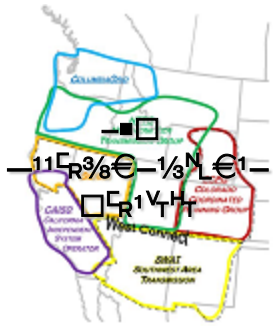


Present Western Interconnection Sub-Regional Planning Groups



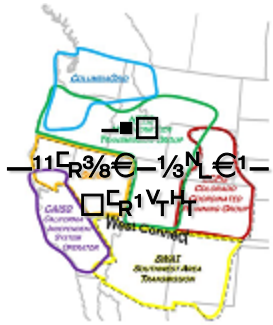
SPGs:

- Six Existing Transmission Groups
- One Group Under Development
- One ISO

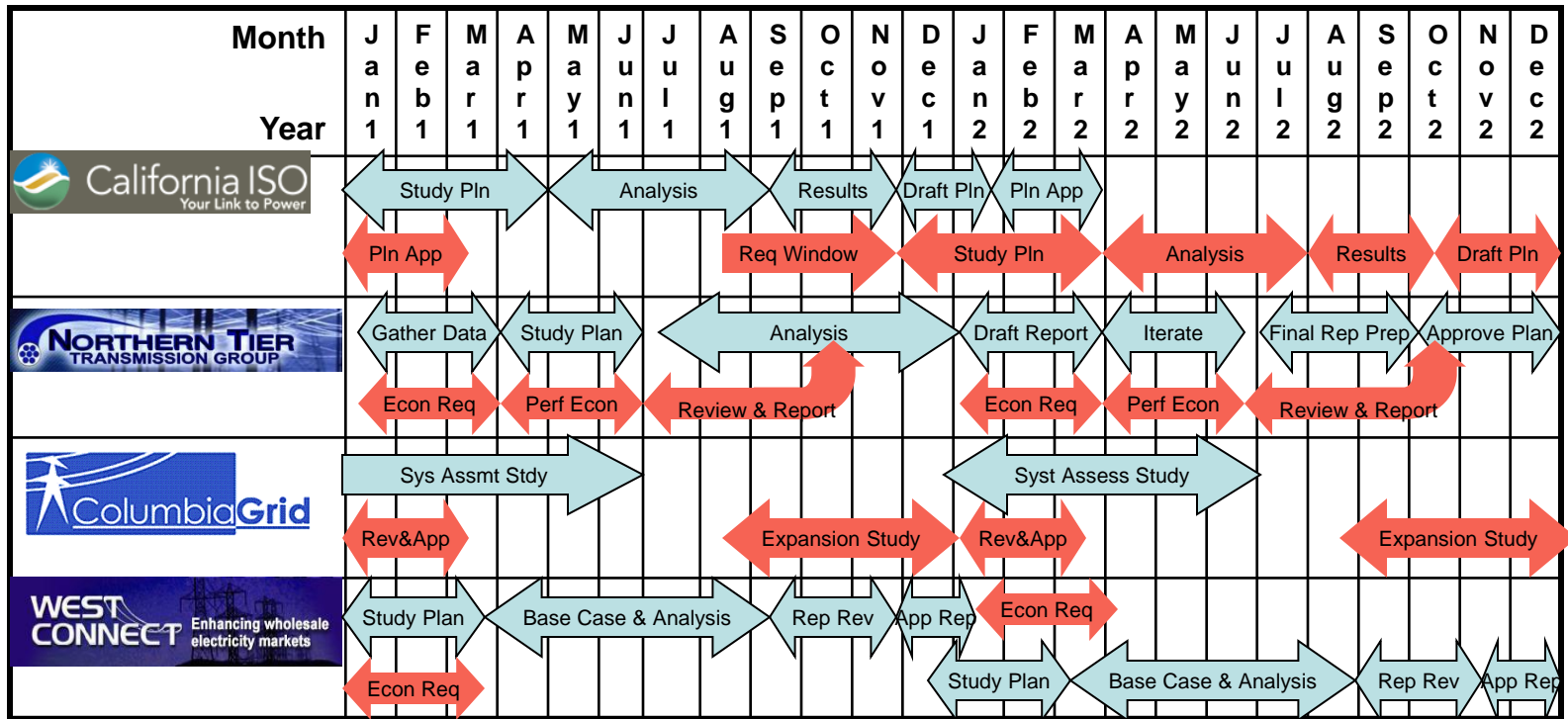


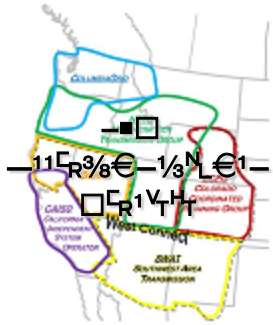
Present SPG Functions & Differences

- Data and Coordination
- Standards, Criteria, and Objectives
- Technical Studies
 - Design, Rating, Compliance
 - OATT: Individual IC and TSR Queue
 - Planning
 - Reliability Performance
 - Import Export
 - Congestion & Economic
- Study Time Frames
 - Short Term
 - 10 Year
 - Long Term (20 Yr)
- Firmness of Need Scenario and Customer Commitment
 - Firm OATT
 - 890 Stakeholder
 - Conceptual, Policy, Long Range Sensitivity
- Planning Cycle & Timing
- Plan & Plan Report
 - Selects best Alternative vs Long Staple
 - Project capital cost estimates
 - Cost Allocation recommendations
 - Transmission Rate Effect Estimates
 - Full Delivered Cost estimates of Need Scenario
- Organization
 - Incorporation
 - Member or Independent approval body
 - Independent staff or members perform studies
 - SPG vote on WECC PCC & other (besides TEPPC)



Present SPG Planning Cycle Alignment





SPG Plans

- Overview of SPG's latest final Planning Report Plans
- Formal Planning reports at individual websites:
 - Northern Tier
http://nttg.biz/site/index.php?option=com_content&task=view&id=193&Itemid=80
 - ColumbiaGrid
<http://www.columbiagrid.org/planning-expansion-overview.cfm>
 - CAISO
<http://www.caiso.com/1f42/1f42d6e628ce0.html>
 - WestConnect
http://www.westconnect.com/planning_reports.php

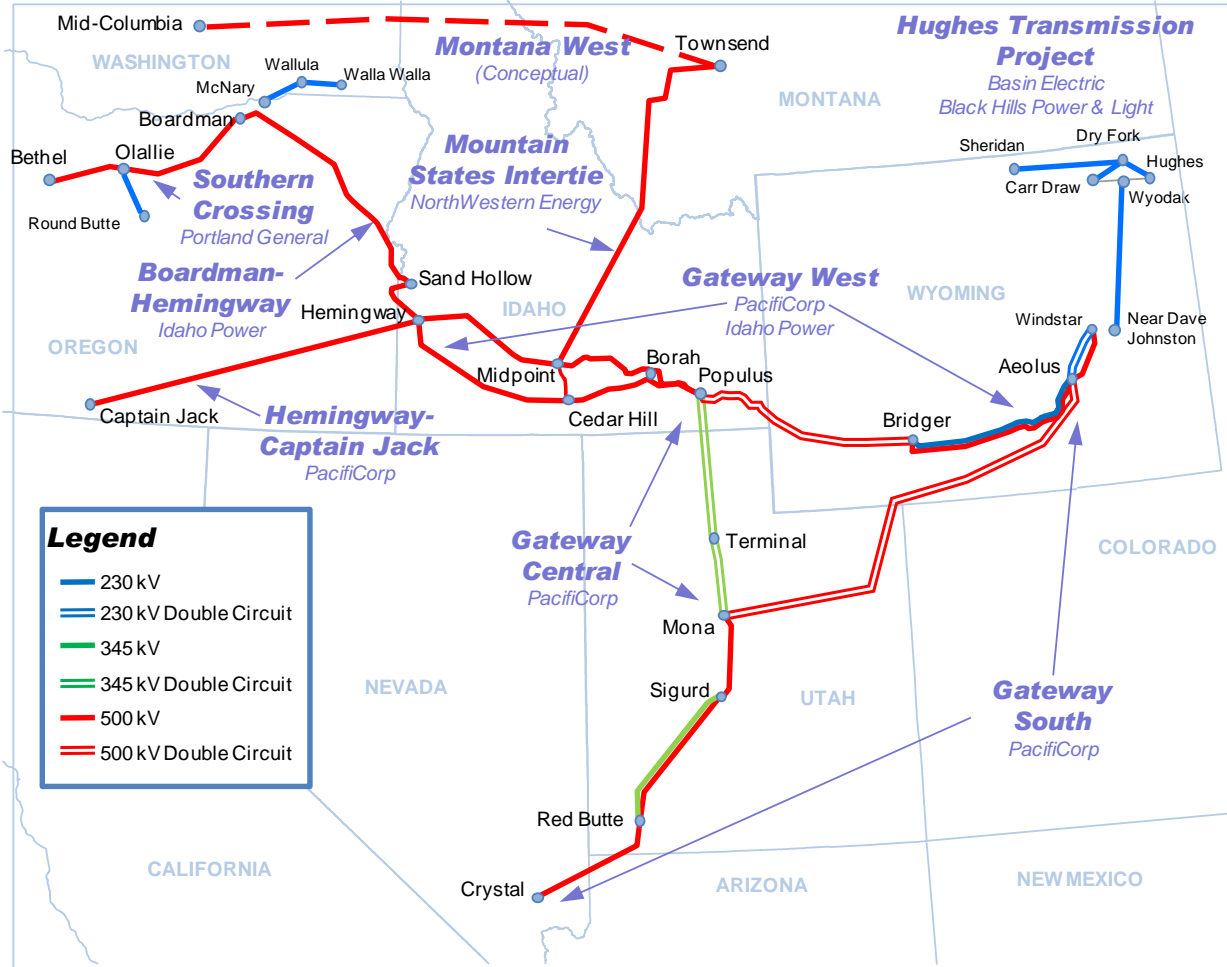






Figure 6: Strategic Plan First and Second Priority Transmission Projects





WEST CONNECT Enhancing wholesale electricity markets





Other Projects, Other Processes

- Projects proposed in Western Interconnection
 - In Three Phase Rating Process
 - Permitting but not in SPG Plans
- Projects include:
 - Mega Merchant Transmission
 - Merchant Generation w/o Comparable Planning Data
 - Policy Scenarios Projects without need identified and associated obligation to serve
 - “Conceptual” and “Long Term” categories
- Problematic:
 - Clogging Rating Process and competing with with Firmer Projects
 - Confusing Corridor and Land Use Managers
 - Causing land owner concern and opposition to all projects

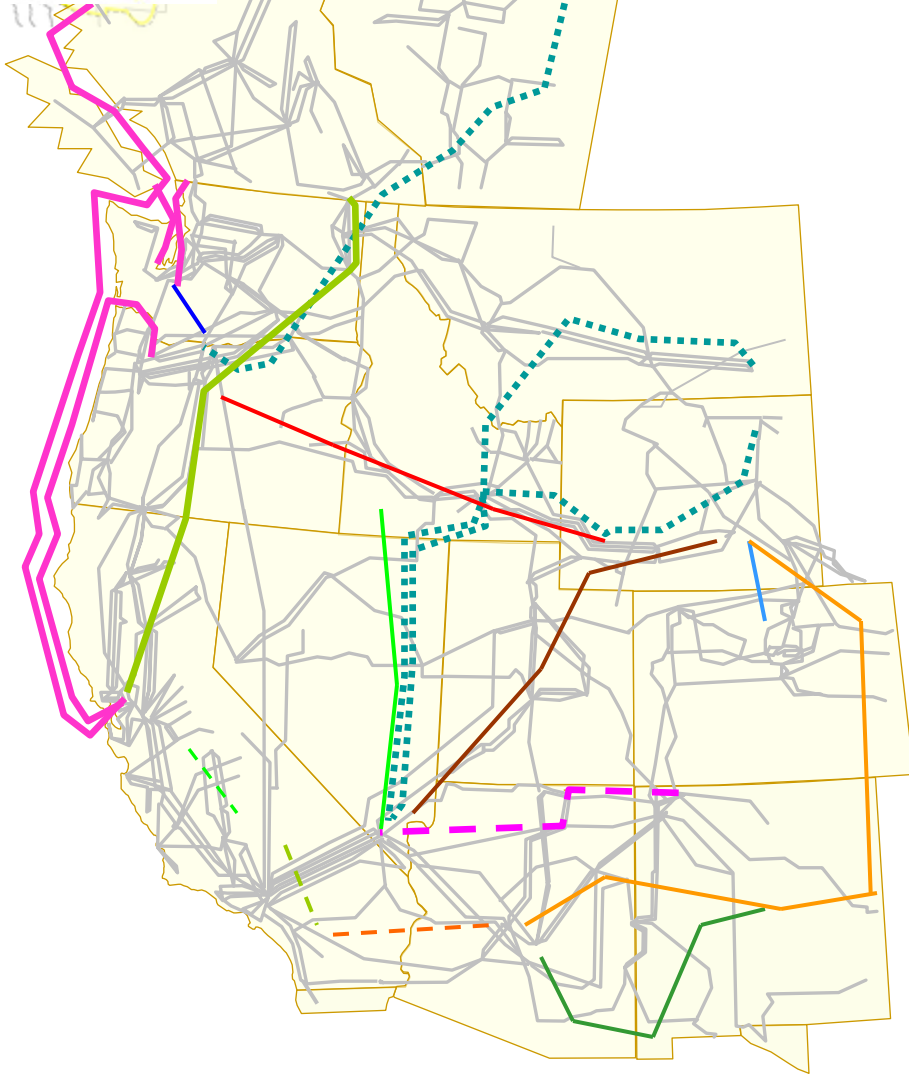


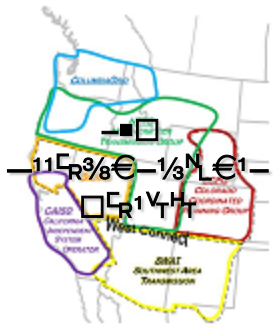
Major Transmission Not in SPG Plans

Proposed Transmission Projects

Projects have been grouped to simplify coding. Not all major projects shown.

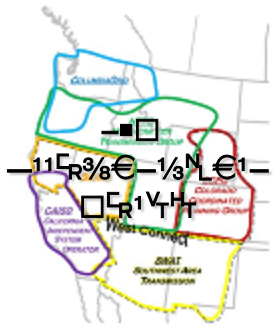
- Sea Breeze Projects
- - - TransCanada Projects
- Gateway & Other NTTG Projects
- Columbia Grid Projects
- TransWest Express
- LS Power & Great Basin Projects
- WY-CO Intertie Project
- High Plains Express
- Sun-ZIA
- Canada/PacNW-NoCalif
- - - Central CA Clean Energy (C3ET)
- - - Green Path North
- - - Devers-Palo Verde 2
- - - Navajo Transmission Project





Issues with Present Process

- Timing of Planning Processes
 - Identification of projects that cross seams
 - Handshake between SPGs on Source and Sink assumptions when SPG boundaries are crossed
- Base Case Preparation and scenarios
 - Stress cases needed and L&R matching
 - PCC Area Coordinator base case preparation Process
 - Powerflow Base Cases and Production cost Model Case transmission system alignment
- L&R Scenario and Policy Alignment
 - WREZ - RETI -LRS
 - IRPs - RPS - NT Load forecasts obligations
 - Timing and alignment of State IRP and other Processes
- Comparable Planning Data
 - Import and Export POD & PORs (source and sink data)
 - Merchant Generation
 - Merchant Transmission



Issues with Present Process

- Coordination & Alignment of plans at the seams and SPG boundaries
- Alignment of planning cycles and data collection
- Data, Plan iterations and changes within Cycle
- Duplicative Stakeholder Planning meetings with Regional Planning and Three Phase Rating Process
- Some bypassing Sub-Regional planning and going straight to Rating Process
- Need Firmness assumptions differ between types of studies performed
 - OATT Firm,
 - 890 Stakeholder Input
 - Conceptual Projects
- All Transmission Providers and Sponsors are not in an SPG
- WECC TEPPC and PCC process to evaluate and select best alternative (pick winners)