



Cost Treatment of Transmission Expansions Driven by Economic Benefits

● Cross-border Meeting
September 21, 2006

Economic Planning Policy

- Plan forward to expand based on projected benefits
- Establish metrics to measure benefit relative to cost
- Establish a set of Criteria to include project in regional plan (MTEP) for cost sharing
- Evaluate benefits metrics to a 20 year horizon; multiple futures and sensitivities
- Establish a method to allocate costs to transmission customers under the tariff
- Establish a 3 year policy assessment and reporting period

Inclusion Criteria - metrics

■ Benefit Metrics

- Blend of 70% production cost reduction, and 30% LMP-based load payment reduction
- Evaluate benefits over three Sub regions in MISO
- System benefit calculated as sum of blended metric for all sub regions with positive benefits in both PC and LMP at sub regional level

Inclusion Criteria - thresholds

- Threshold Criteria for benefit sharing
 - 345 kV Projects only (initially)
 - \$5 M and higher projects
 - Prod Cost metric and LMP metric must each be positive over entire region
 - Benefit/Cost threshold 1.2:1 for 1 year out projects, up to 3.0:1 for 10 year out projects – linear scale

Expanding value metrics

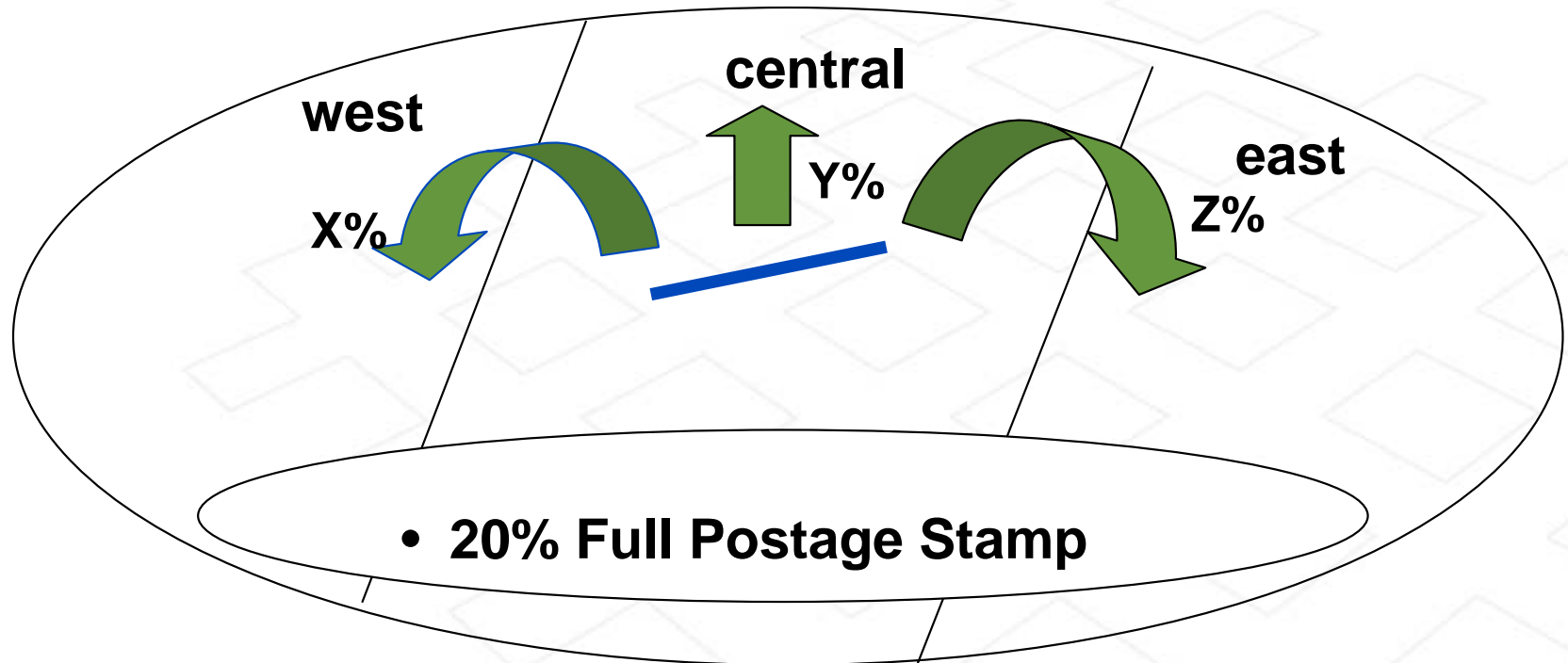
- Recognize there are other value drivers besides production cost and LMP
- Working to develop methods to evaluate and demonstrate such values
- Key missing benefit metric is Generation Reserve Capacity Reductions achievable through better interconnected market

Allocation of costs

■ Blended method

- 20% to all grid users based on load ratio
- 80% to Sub regions based on evaluation of relative benefit – load ratio within the Sub region

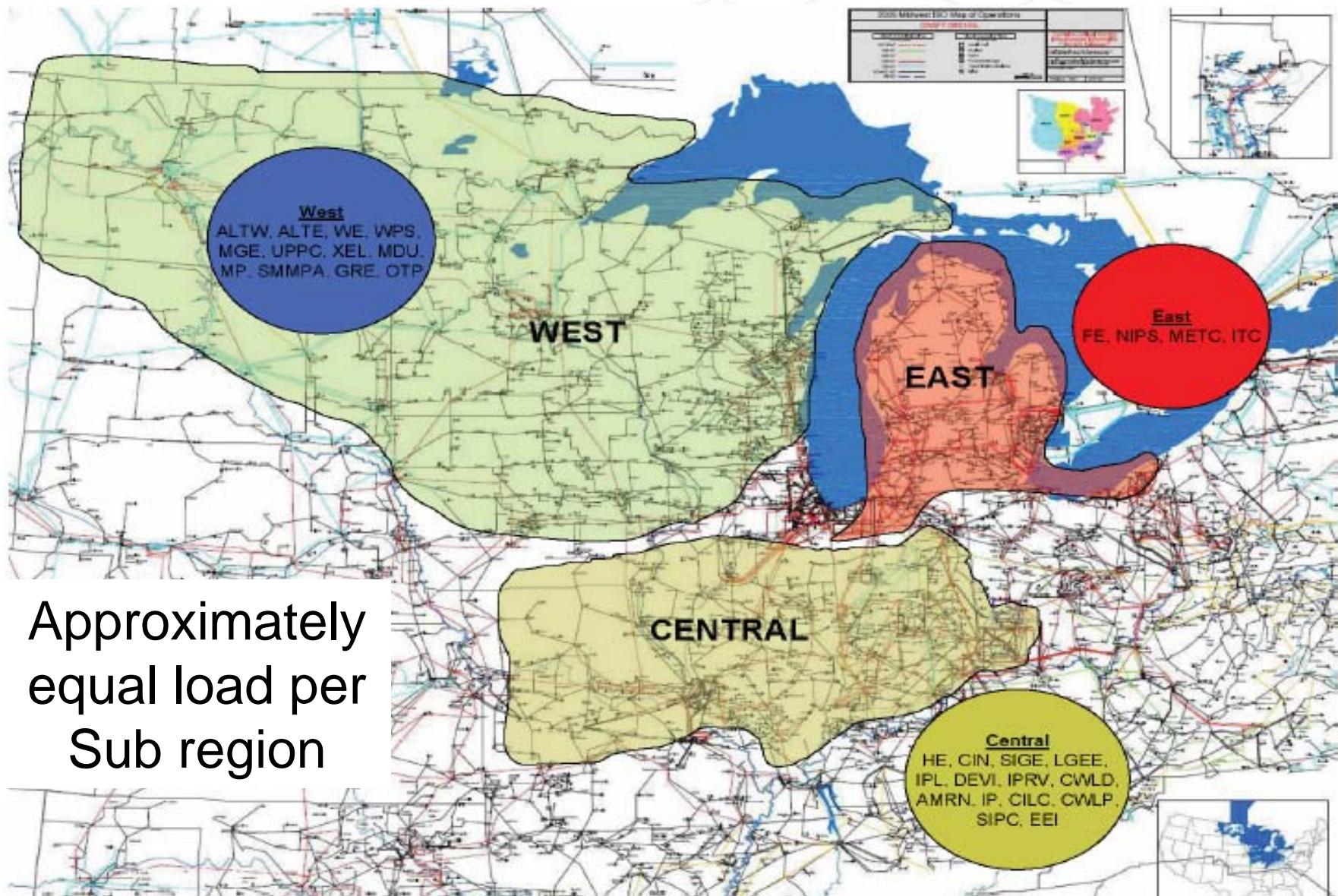
Concepts Applied in MISO Internal Line



- 80% to Sub Regions based on Econ Metric ($X+Y+Z$)
- Postage Stamped within Sub Regions

Sub regions

Existing Planning Sub regions



Sample



WEIGHTED-GAIN / NO LOSS SAMPLE CALCULATION

RBP Impact to Load from Changed LMPs			RBP Impact to Load from Adjusted Production Cost (APC)						
Sub Region Load Payment Change (negative is good)			Sub Region APC Change (negative is good)				Sub region benefits using 30% Load Payment Change + 70% APC Change		
West	Central	East	West	Central	East	Sub regions with Two Positive Impacts Only	West	Central	East
							-\$1,117,000	-\$5,064,200	\$0
						Total Sub region Benefits	-\$6,181,200		
-\$2,230,000	-\$12,158,000	-\$490,000	-\$640,000	-\$2,024,000	\$40,000	Percent of benefits in each Sub region used to allocate the 80% Zonal PS	18%	82%	0%

Total annual benefit = \$6,181,200

For a 5 year horizon project, B/C = 2.0

Benefits support a project with an annual cost of \$3,090,600