Thursday, October 6th

9:30 a.m.  
Coffee-Tea service

10:00-10:15  
Introduction to Workshop

10:15-10:45  
The Operation of Wholesale Electricity Markets

10:45-11:45  
Game Play: Transmission Constraints; Market Power
All participants play the roles of generation companies (“gencos”) bidding into a simple electricity market with and without transmission constraints.

11:45-12:15  
Market Power in Electricity Markets

12:15-1:00  
Lunch (On your own)

1:00-1:30  
Forward Contracts: Protecting Consumers from Price Volatility and the Exercise of Unilateral Market Power

1:30-2:15  
Game Play: Pre-Assigned Forward Contracts
Participants play the roles of gencos bidding into the wholesale electricity market: 1) without forward contracts, and 2) with pre-assigned forward contracts. We compare genco strategy and market outcomes between the cases.

2:15-3:15  
Game Play: Forward Contracts and the Retail Side
Half of the participants play the role of gencos and the other half play load-serving entities (LSEs). The LSEs try to manage their price risk by negotiating forward contracts for electricity with gencos or calling “critical peak pricing” days.

3:15-3:30  
Break
3:30-4:45  ISOLATED MARKETS GAME (Run #1)
California has a competitive wholesale market with 4 gencos and 4 LSEs. There are 4 vertically-integrated utilities outside California ("Rest of West"), each with its own transmission line into California. The CA gencos bid their generating capacity into the CA market and may establish forward contracts with CA LSEs or trade power with RoW utilities. The CA LSEs may establish forward contracts with CA gencos or trade power with the RoW utilities. The RoW utilities may trade power with CA gencos, CA LSEs, or the other three RoW utilities.

4:45-5:00  Day 1 Wrap-Up and Plan for Day 2

Friday, October 7th

7:00-9:00  Continental Breakfast with Coffee-Tea Service

9:00-10:00  INTEGRATED MARKET GAME (Run #1)
Three of the four vertically-integrated utilities in the RoW join the California market to form a West-Wide ISO.

10:00-11:00  ISOLATED MARKETS GAME (Run #2)
Replay of the Isolated Markets Game with players taking different roles.

11:00-11:15  Break

11:15-12:15  INTEGRATED MARKET GAME (Run #2)
Replay of Integrated Markets Game with same roles as Run #2 of the Isolated Markets Game

12:15-1:00  Final Debrief: What were the effects of market integration, including on:
- Cost of service for RoW utilities
- RoW utility exposure to price volatility and the exercise of unilateral market power (with and without forward contract coverage)
- Ability of RoW utilities left outside the market to negotiate favorable power trades