



IRP Public Input Meeting

December 7, 2005



Agenda

- Overview of 2006 IRP Public Process
 - IRP Team Update
 - 2006 IRP Work Plan
 - PIM Participant Working Group (“WG”) Approach
 - Public Process Expectations
- 2006 IRP Studies
- 2004 IRP Update Summary and Revised Action Plan



Overview of 2006 IRP Public Process





IRP Team Update

Mark Klein



IRP Team Updates

- Mark Klein – Managing Director, Planning & Analytics
- Greg Duvall – Director, IRP & Regulatory Strategy
- Peter Warnken, Project Manager
- Michael Liljenwall, Project Coordinator

Modeling Team

- Ken Dragoon – Modeling Team Lead
- Dan Swan – Modeler
- Stan Williams – Modeler

DSM

- Jeff Bumgarner – Director, DSM (Replacing Mike Koszalka on DSM planning and modeling)

How To Contact the IRP Team

Integrated Resource Planning

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We ask that information requests be made by email

- Improves accuracy in interpreting requests
- Expedites request processing and tracking



2006 IRP Work Plan

Pete Warnken



2006 IRP Work Plan - Highlights

- Public Process Schedule
 - Schedule full Public Input Meetings for mid-April, early July, and mid-October. Load Forecasting Workshop scheduled for January 24
 - Establish PIM Participant Working Groups, agendas, and logistical arrangements; target Working Group deliverables for discussion at April and July PIMs
 - Distribute preliminary IRP draft and assumptions by early October (one month earlier than 2004 IRP distribution date)
 - File IRP with state commissions by mid-January 2007
- Modeling Plan
 - Revisit strategic assumptions (resource adequacy, market depth, environmental/renewables, etc.)
 - Implement modeling and analysis enhancements
 - Use Capacity Expansion Module (CEM) to select candidate resource portfolios based on range of alternative futures (“Portfolio Scenarios”)
 - Run deterministic and stochastic simulations with the candidate portfolios using Planning and Risk (PaR) modeling system
 - Select the Preferred Portfolio based on cost/risk evaluation criteria
 - Use the CEM and the Preferred Portfolio to conduct Action Plan Path Analysis. Limit CEM to Preferred Portfolio resources to determine responsiveness to alternative futures

2006 IRP Work Plan and Timeline

Task	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	6-Aug	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07
Update Model Inputs, CEM and Planning & Risk (PAR)														
PIM Working Group Activities (Modeling Methods)														
Refresh Loss of Load Probability (LOLP) and Wind Studies														
Load Forecasting Workshop, Jan. 24		X												
Develop Load & Resource Balance														
Update Strategic Assumptions														
Implement Modeling and Analysis Enhancements														
Public Input Meeting, Mid-April					X									
PIM Working Group Activities (IRP Resources/Scenarios)														
Conduct Portfolio Optimization Runs Using the CEM														
Public Input Meeting, July								X						
Write and Distribute Preliminary Draft Report														
Conduct Portfolio Simulations (Deterministic/Stochastic)														
Select Preferred Portfolio										X				
Conduct Preferred Portfolio sensitivity analysis using the CEM														
Public Input Meeting, October												X		
Public Comment Period (Four Weeks)														
Finalize IRP Report														
File IRP Report with State Commissions														X



PIM Participant Working Group Approach

Pete Warnken



Working Group Objectives and Rationale

Objectives

- Provide PIM Participants with greater consultative role in PacifiCorp's IRP planning
- Provide a forum for constructive debate early on in the IRP process
- Provide PAC with proposals that address specific technical challenges as well as issues raised by PIM Participants
- Enhance information sharing by enabling PIM Participants to evaluate Working Group proposals

Rationale

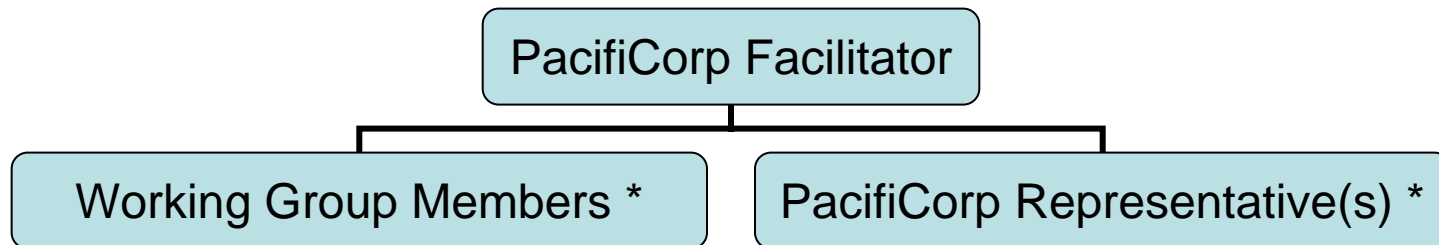
- To enhance the value of the IRP public process
- Engages PIM Participants, via balanced representation, to discuss difficult issues
- Smaller groups may provide a more efficient mechanism for formulating ideas
- Addresses PIM Participant recommendations for a more distributed meeting strategy

Ground Rules

- As the owner of the IRP—and in alignment with customer and shareholder obligations—decisionmaking rests with PacifiCorp
- Seek balanced representation for WG membership – need to ensure that different viewpoints are included while keeping WGs at a manageable size (10 – 14 members)
- PacifiCorp representation will include a Facilitator and at least one technical expert
- WGs determine and manage their own schedules and meetings subject to major milestone dates
- Communications will be managed by the PacifiCorp Facilitators via the IRP Mailbox
- Status reports/meeting minutes distributed to all PIM Participants

Ground Rules, Continued

Working Group Member Responsibilities



- **PacifiCorp Facilitator** – Serves as PacifiCorp WG liaison, work/meeting coordinator, and main scribe
- **PacifiCorp Representative(s)** – PacifiCorp resources to address issues and modeling approaches; may also provide WG members with technical background information
- **Working Group Members** – Any PIM participant may join a Working Group

* Working Groups, with help from the PacifiCorp Facilitator, will task their own members with documentation and report writing responsibilities

Ground Rules, Continued

- WG process will be flexible:
 - Open to PIM Participant suggestions on managing WGs
 - Depending on the progress of a Working Group, additional tasks can be assigned if agreed to by the members
 - A WG can be reconstituted or retired if necessary
- Deliverables:
 - Findings Report
 - Documents proposals and areas of general agreement/disagreement
 - Provides description of alternative modeling and analytical approaches
 - Uses state standards & guidelines and acknowledgement order conditions as basis
 - Distributed to PIM Participants ahead of PIM meetings
 - PIM presentation with discussion opportunity
 - PacifiCorp final comments on Working Group outcome (issued after receiving PIM Participant comments on Findings Report)

Proposed Working Groups for 2006 IRP Cycle

- Modeling Methods and Assumptions
 - DSM – PAC Facilitator, Jeff Bumgarner
 - Renewables – PAC Facilitator, Ken Dragoon
 - Thermal Resources – PAC Facilitator, Pete Warnken
 - Transmission – PAC Facilitator, Stan Williams
 - Risk Analysis – PAC Facilitator, Ken Dragoon
- Portfolio Scenarios – PAC Facilitator, Pete Warnken
 - For determination of candidate portfolios to be modeled with PaR, and for Preferred Portfolio sensitivity analysis (Action Plan Path Analysis)

Major Milestone Dates – Modeling Methods and Assumptions

- PAC sends out WG information packages with assignments, 12/22/05
- WGs finalize their work schedules, 1/6/06
- WGs distribute their Findings Reports to PIM Participants, 3/31/06
- PIM Participants and PAC submit comments to the WGs, 5/3/06
- PAC distributes its final comments to PIM Participants, 5/22/06

Working Group Formation – Next Steps

- Assess interest in Working Group membership
 - Fill out membership questionnaire (handout)
 - Email questionnaire to PIM Participants
- PacifiCorp makes WG membership assignments based on total number of volunteers, WG interests, representation goals, and commitment level
- PacifiCorp distributes information package to each WG by 12/22/05

Public Process Expectations

- We are changing the process to address Participant feedback. In return, we anticipate greater proactive contribution from Participants as well as an effort to build consensus
- We will continue with the same general meeting format (Recommendations on presentation topics are welcome!)
- Work Plan is provisional given uncertain timing and impacts of new state Standards & Guidelines (Oregon and Washington)



2006 IRP Studies

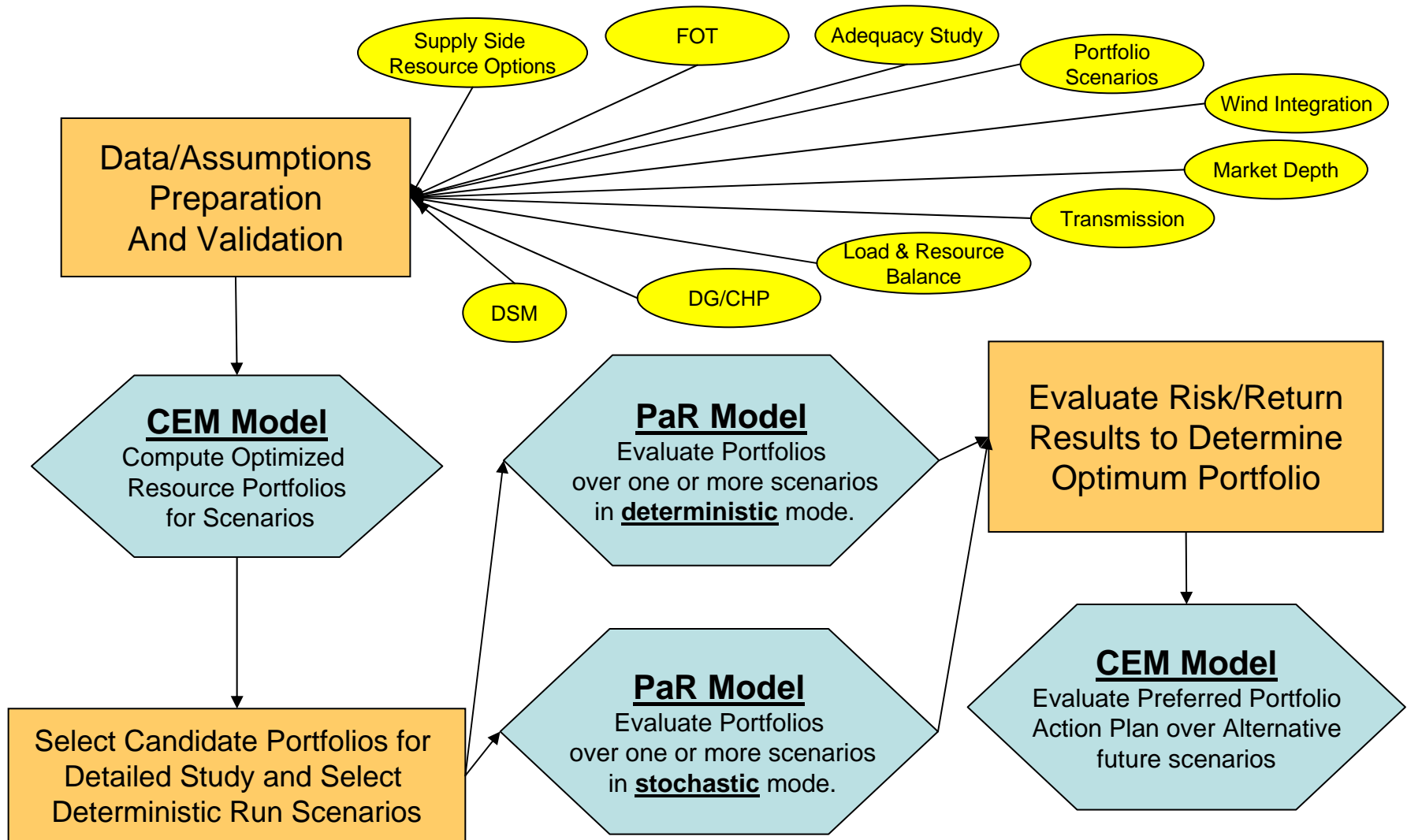
Ken Dragoon



IRP Studies for 2006 IRP

- Data/Assumptions Update
 - Wind assumptions update
 - capacity credit, integration costs, modeling approach
 - Front Office Transactions (FOTs) update
 - Revisit levels of FOTs
 - Market Depth & Liquidity
 - DSM
 - Accommodate stakeholder feedback and acknowledgement order conditions
 - Combined Heat & Power (CHP), and Distributed Generation modeling
 - Integrated Gasification Combined Cycle analysis
 - Risk analysis
 - Resource adequacy measures and targets.
 - Stochastic modeling enhancements (i.e., coal prices)
- Develop Resource Portfolios with Capacity Expansion Module
- Evaluate select portfolios through deterministic and stochastic PaR model runs.
- Determine Preferred Portfolio based on consideration of cost/risk tradeoffs
- Evaluate robustness of preferred portfolio Action Plan under alternative future scenarios

Modeling Process Diagram





2004 IRP Update Summary and Revised Action Plan

Greg Duvall

Stacey Kusters

Jeff Bumgarner



2004 IRP Update Summary

- Reviewed draft 2004 Update results at October 5th PIM
- Filed with state commissions for informational purposes on November 3, 2005
- Evaluated 2004 IRP Preferred Portfolio against updated resource information and modeling assumptions (including June 2005 natural gas/electric power price forecasts)
- Evaluated four additional portfolios that align with the new Load & Resource Balance and revised position outlook
- New Preferred Portfolio selected based on PVRR cost and risk criteria – Includes removal of the CY 2009 resource, deferral of the coal proxy resource to CY 2012, and building of Path C Upgrade
- Action Plan was revised, including suspension of RFP 2009
- Starting Point for 2006 IRP

2004 IRP Update Action Plan Highlights

Action Item	Timing*
Renewables - pursue 1,400 MW of economic renewable resources	RFP 2003B currently underway. Anticipate initiating a new procurement activity in 2006.
DSM – pursue 88 MW of cost effective Class 1 DSM	Summer – Fall of 2005
DSM – pursue 200 MWa of new cost effective Class 2 DSM	Summer – Fall of 2005
Distributed Generation – include CHP and standby generation as eligible resources in supply-side RFPs	Work with the Independent Evaluator currently on retainer in Utah, to identify the best way to procure this need given the elimination of 2009 resource.
Pursue Path C Upgrade for CY 2010	Transmission service requests have been initiated.
Thermal Resource in CY 2012 (575 MW)	Work with the Commissions, and the Independent Evaluator currently on retainer in Utah, to identify the best way to procure this resource need given the type of proxy.
Transmission - actively participate in regional transmission initiatives (RMATS, Grid West, etc.)	On-going
Incorporate Capacity Expansion Module as a modeling tool	Currently underway

* Details in Chapter 5 of the 2004 IRP Update



Next Steps

Pete Warnken



Next Steps

- Load Forecasting Workshop – January 24, 2006
- Working Group
 - PAC sends out WG information packages with assignments, 12/22/05
 - WGs finalize their work schedules, 1/6/06
 - WGs distribute their Findings Reports to PIM Participants, 3/31/06
- Next PIM is planned for Mid-April
 - Policy for establishing meeting dates