

# Base Load Request for Proposals

**Bidders Conference**  
**April 25, 2007**



**Pacific Power | Rocky Mountain Power | PacifiCorp Energy**

# Agenda

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- Role of the Independent Evaluator (IEs)
- Request for Proposal (RFP) schedule
- PacifiCorp workgroups and communication
- Regulatory Overview
- Load and Resource Balance
- Overview of the Request for Proposal
  - ▶ Request for Qualifications
    - Credit
      - » Credit Requirements
      - » Credit Matrix
      - » Credit Security Methodology
  - ▶ Structure of RFP
  - ▶ Pricing Input Sheet
  - ▶ Company Benchmark
  - ▶ Evaluation Process
    - Initial shortlist
    - Final shortlist

## Role of the Independent Evaluators (IEs)

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- Two Independent Evaluators will be involved in the Request for Proposal (RFP)
  - ▶ The Oregon IE - Boston Pacific and Accion
  - ▶ The Utah IE - Merrimack Energy
- In the RFP Attachment 4 outlines the Role of the Independent Evaluator and Attachment 20 provides the Company self imposed internal code of conduct
- Merrimack will be managing the overall Q&A process and maintain all documentation, amendments and or announcements starting April 5, 2007 for the term of the process on their interactive web site at <http://www.merrimackenergy.com/>
- Merrimack will coordinate all correspondence and interaction with the Bidders and the company with Boston Pacific and Accion.
- All RFP material prior to April 5 can be located on PacifiCorp web site.
  - ▶ <http://www.pacificorp.com/Article/Article62879.html>

# Schedule for the Base Load Request for Proposal

- **RFP issued** April 5, 2007
  - RFP bid conference (Issued + 20 days) April 25, 2007
  - RFQ form due (Issued + 30 days) May 7, 2007
  - Responses due (Issued + 75 days) June 19, 2007
  - Evaluation complete Issued + 120 days
  - Oregon Commission acknowledgement of final shortlist<sup>1</sup> Issued + 200 days
  - Bidder negotiation Issued + 240 days
  - PacifiCorp decision Issued + 270 days
  - Utah Public Service Commission approval proceeding (180 days) Issued + 450 days
  - Avoided cost filing<sup>2</sup> Issued + 500 days
- <sup>1</sup>The Oregon Commission may acknowledge the final shortlist. See Oregon Order No. 06-446 Guideline 13.
- <sup>2</sup>Updated avoided costs filing by state will be made to the extent required by law or regulatory order.

# PacifiCorp Work Groups

- The source of information from slides 5 and 6 are from an internal code of conduct training
- No member of the Evaluation Group will have **any** contact or communication with **any** bidder or **any** member of the Benchmark Team regarding RFP matters, other than through the Independent Evaluator.
- There are three separate and independent Groups/Teams
  1. **The Evaluation Group**
  2. **The Benchmark Team**
  3. **The RFQ Team**

## 1. Evaluation Group – six separate work groups

- ▶ Blinded (restricted) Individuals- shall not be given access to non-blinded individuals before final short list. Shall be given access to non-blinded (redacted) bidder's information.
  - » Origination
  - » Structuring and Pricing
  - » Environmental
- ▶ Non-blinded (unrestricted) Individuals – will have access to all information; however, will not be allowed to share information with restricted blinded individuals until after the final shortlist.
  - » Credit and Risk
  - » Integrated Resource Planning
  - » Commercial and Trading Legal

# PacifiCorp Work Groups (cont'd)

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## 2. Benchmark Team

- ▶ PacifiCorp Energy Generation
  - The Benchmark Team will be responsible for the Company's resources.
  - The Benchmark Team will submit the pricing input sheet of their benchmark to the IRP group through the IE, with all the same information as a 3rd party bidder.
  - The IRP work group will input the pricing input sheet into the IRP model for the benchmark portfolios.
    - » This is not an interactive process.
    - » The IRP work group will not share information received from the Benchmark Team with the Evaluation Team

## 3. Request for Qualification (RFQ) Team

- ▶ The RFQ team consists of IRP, Legal, Credit and the IE.
  - The RFQ Team is not a blinded Team
  - The RFQ will determine if Bidders qualify to submit a proposal

## Communication Protocol

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- The communication protocol between the IE, Evaluation Team and the Benchmark Team will be conducted as follows:
  - ▶ The IE **must participate** in any communication between members of the Benchmark Team and Evaluation Group, and must retain a copy of all such correspondence for availability to regulatory auditors.
  - ▶ **No communication** regarding blinded Bid information either directly or indirectly, between the non-blinded personnel and other Evaluation Group members until the final shortlist is determined unless the communication is done in the presence of the IE.
  - ▶ The non-blinded personnel **must not reveal** to other Evaluation Group members, either directly or indirectly in any form, any blinded information regarding the identity of any of the Bidders.
  - ▶ The Evaluation Group shall have **no** direct or indirect contact or communication with any Bidder other than through the IE until a final shortlist is selected by the company.

## Communications Protocols (cont)

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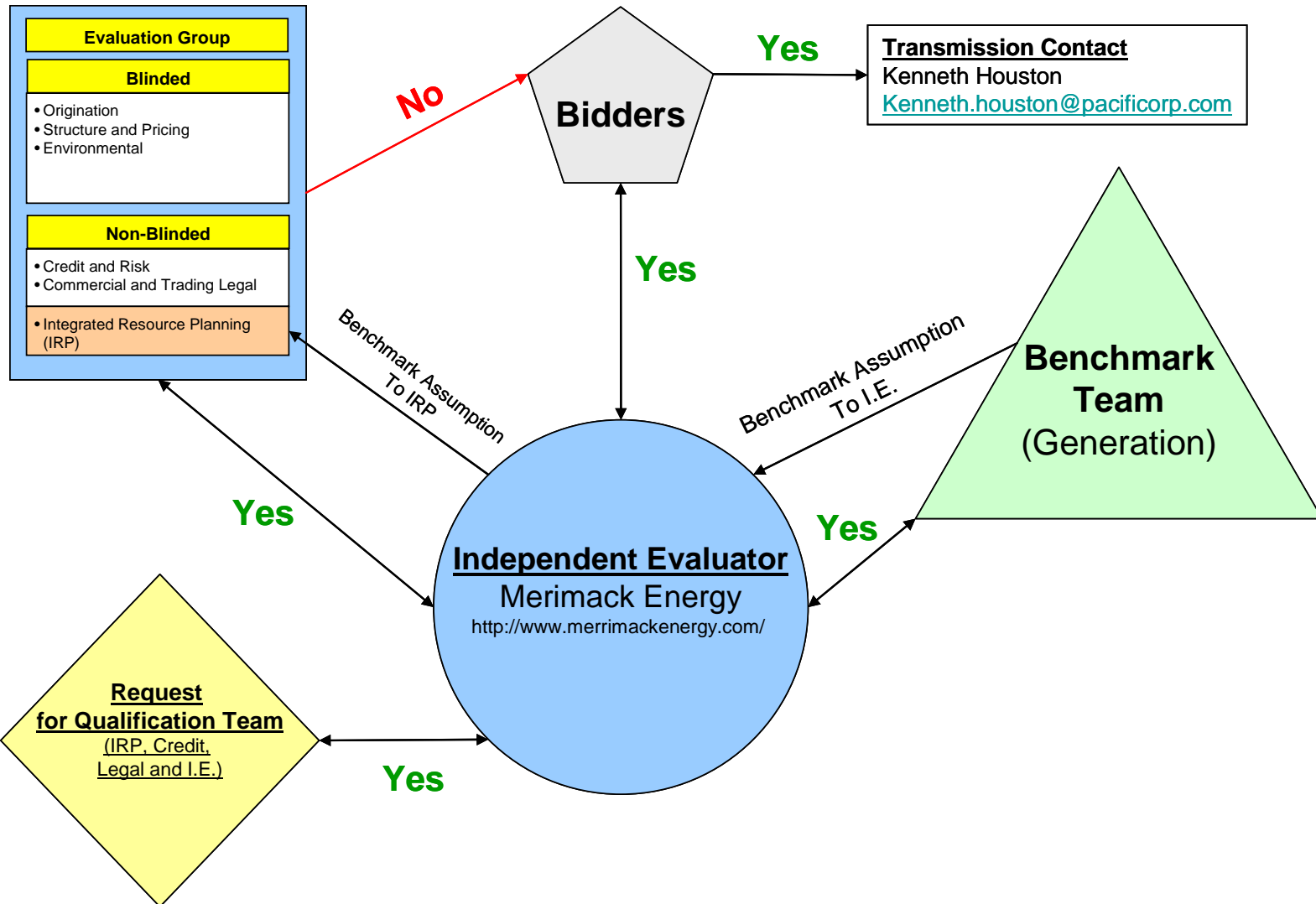
- Members of the Benchmark Team **shall not** communicate with members of the Evaluation Team about the benchmark resources or the RFP process outside of the presence of the Independent Evaluator.
- The Evaluation Group, including non-blinded personnel, may not be members of the Benchmark Team, nor communicate with members of the Benchmark Team during the Solicitation process about any aspect of the Solicitation process except as provided through the interface of the IE, the Evaluation Team and the Benchmark Team.
- Consistent with PacifiCorp’s identification of shared employees under FERC’s Standards of Conduct, the IRP work group will still be treated as a shared resource to perform work for the Evaluation Team and the Benchmark Team.
- The IRP work group will not share any information it obtains between such Teams and the IRP group **will not** share any non-public transmission system information with Marketing Affiliate at any point in this process.
- Bidders **will be** directed to employees in PacifiCorp’s Transmission Business for any transmission related questions.

## Regulatory Overview

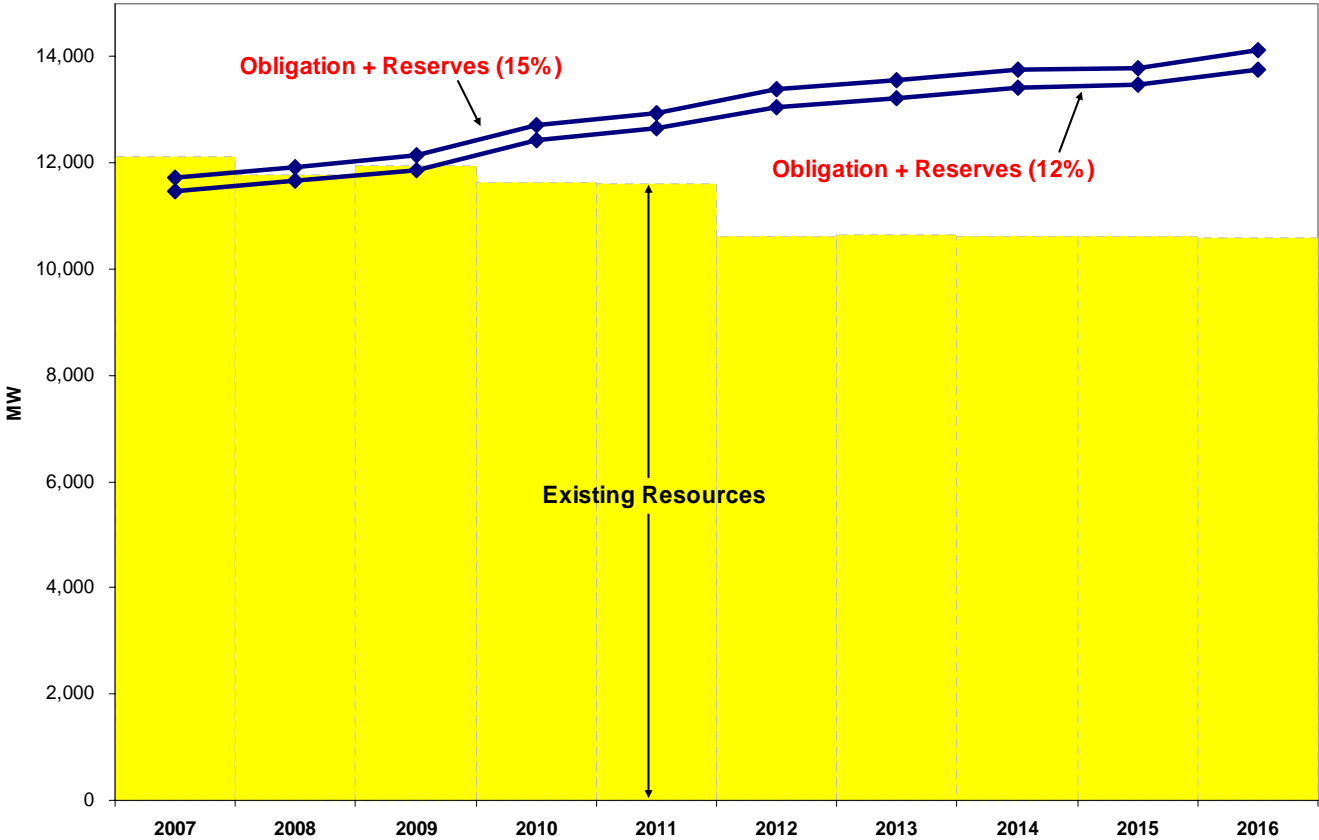
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- A regulatory out clause will not be included in any of the terms and conditions in any of the underlying contracts or in the RFP
- State Overview
  - ▶ Utah
    - The Utah Commission approved the RFP
    - Senate Bill 26 will require all resources that result from the RFP to be approved by the Utah Commission
      - » SB26 requires that the capital costs or the power purchase agreements be approved by the Utah Commission prior to the execution of any contracts.
  - ▶ Oregon
    - The Oregon Commission denied the RFP however, indicated that the company did not require commission approval to issue the RFP
      - » The commission order allows the company
        - » To take the resources which are short listed to the Commission for acknowledgement and or
        - » Seek prudence through a rate case

# RFP Group Relationship Overview



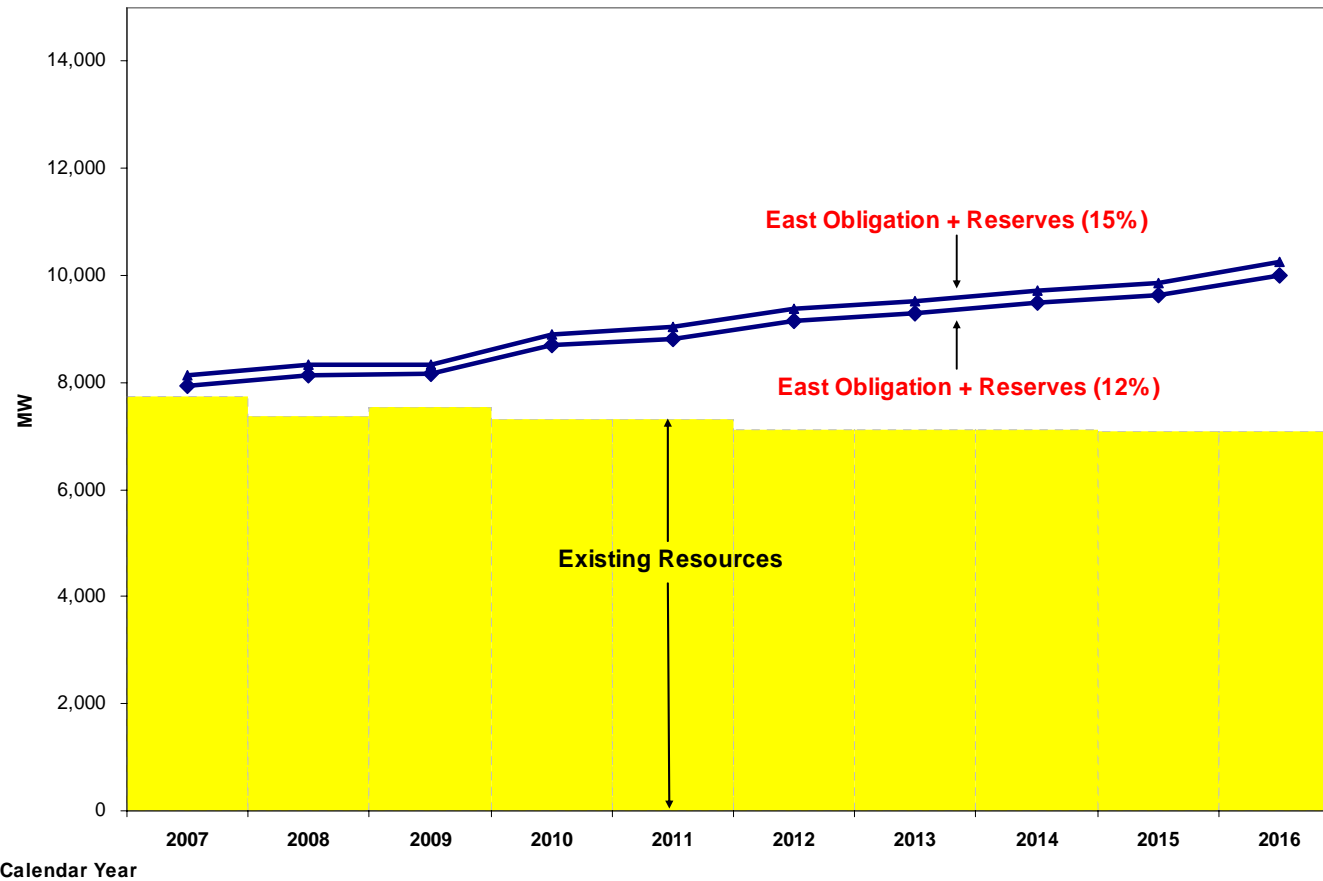
# System Capacity Chart



- 12% PRM deficits: 2012 - 2,446 MW, 2014 - 2,794 MW
- 15% PRM deficits: 2012 - 2,768 MW, 2014 - 3,126 MW

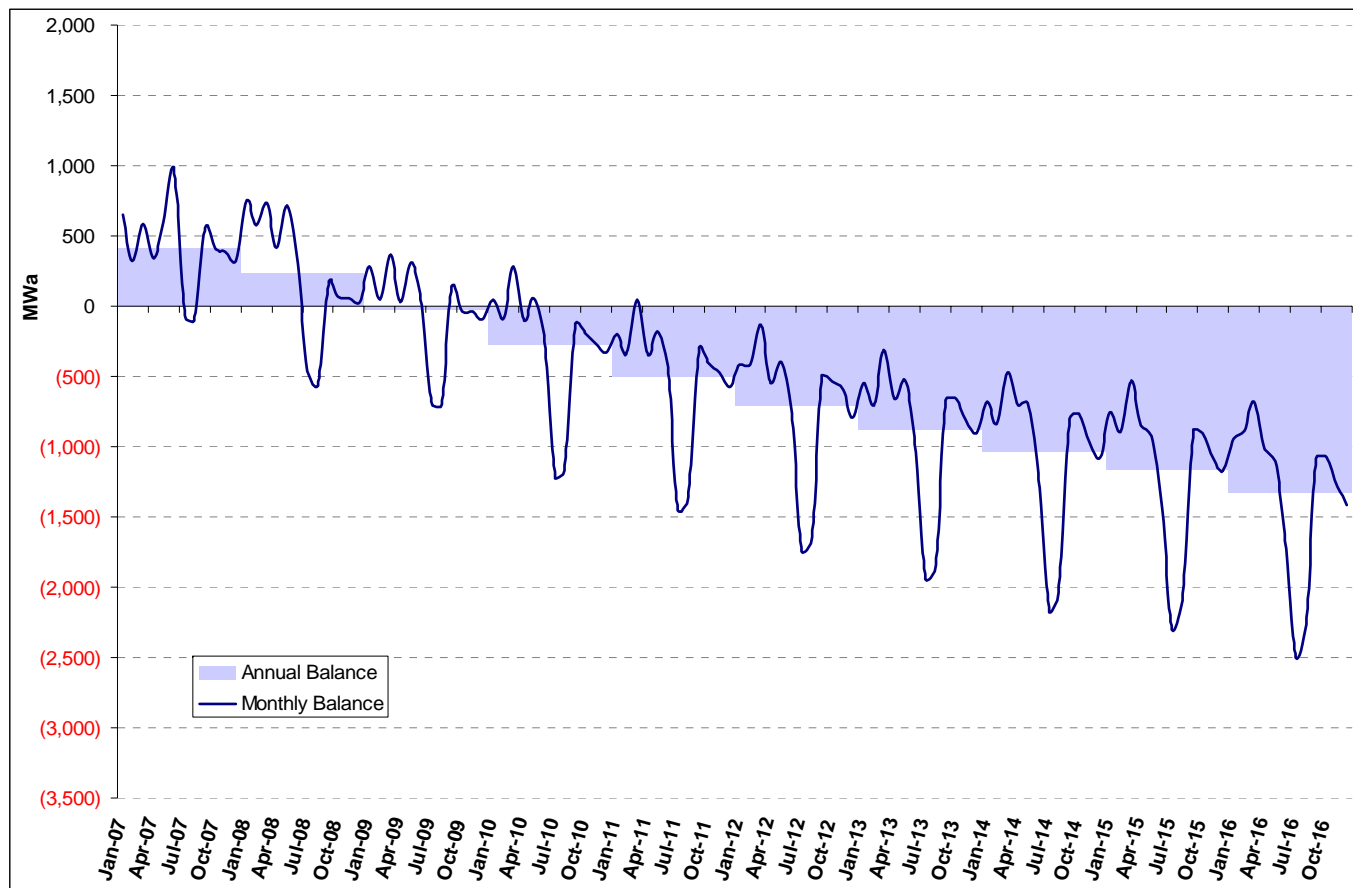


# East Capacity Chart



- 12% PRM deficits: 2012 - 2,041 MW, 2014 - 2,377 MW
- 15% PRM deficits: 2012 - 2,262 MW, 2014 - 2,607 MW

# Monthly and Annual Average Energy Balance



- Assumes critical water hydro and a 12 percent planning reserve margin
- Energy from Gadsby units assumed to be available during heavy load hours
- Does not include economic considerations (addressed with IRP models)

# Overview of the Request for Proposal

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- **Request for Qualification** is due May 7, 2007
  - ▶ IE provides RFQ to Bid Team for evaluation
  - ▶ Bidders will either pass or fail the initial RFQ screening
    - IE will be consulted during the evaluation process
  - ▶ The RFQ screening will consist of two parts
    - Appendix A
      - » Bidders Qualifications, Capability, and Experience
    - Appendix B
      - » Bidders Credit Information RFQ Requirements for Credit
      - » Identify affiliate relationship, if any
      - » Specify the exact, legal counterparty names
      - » Provide exact, legal names of credit support providers
      - » Provide evidence of ability to provide any required credit support
        - » Commitment letter from financial institution providing a letter of credit
        - » Commitment letter from proposed guarantor

## Credit Requirements

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- Credit Requirements will be determined by:
  - ▶ Credit quality of the Bidder
  - ▶ Type of Eligible Resource
    - Power Purchase Agreement, Tolling Service Agreement, Asset Purchase and Sale Agreement, EPC Contract, etc.
    - Asset backed vs. Non-asset backed
  - ▶ Size of Eligible Resource
  - ▶ Date the resource comes online (June 2012, June 2013 or June 2014)
  
- The Credit Matrix displays the maximum value of credit assurances required based on the factors above
  - ▶ Credit assurances may include one or more of the following:
    - Parental Guaranty
    - Letter of Credit
    - Other (as determined by PacifiCorp in its reasonable discretion)
  - ▶ A Credit Matrix for each type of Eligible Resource for 2010 is shown on the following pages

# Credit Matrix

Maximum Value of Credit Assurances to be Posted for each range of MW for a 2012 Resource  
Based on Size and Type of Resource Alternative Bid

For Eligible Resource Alternatives 3, 4, 5, 6 and 7

Size of Nameplate bid in MW ⇒	100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1100	1101-1200	1201-1300
<b>Credit Rating</b>													
AAA/Aaa and above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA+/Aa1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA/Aa2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA-/Aa3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A+/A1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A/A2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A-/A3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
BBB+/Baa1	\$0	\$0	\$0	\$0	\$0	\$0	\$13,866,200	\$30,132,800	\$46,399,400	\$62,666,000	\$78,932,600	\$95,199,200	\$111,465,800
BBB/Baa2	\$0	\$0	\$0	\$0	\$6,333,000	\$22,599,600	\$38,866,200	\$55,132,800	\$71,399,400	\$87,666,000	\$103,932,600	\$120,199,200	\$136,465,800
BBB-/Baa3	\$0	\$0	\$0	\$15,066,400	\$31,333,000	\$47,599,600	\$63,866,200	\$80,132,800	\$96,399,400	\$112,666,000	\$128,932,600	\$145,199,200	\$161,465,800
Below BBB-/Baa3	\$16,266,600	\$32,533,200	\$48,799,800	\$65,066,400	\$81,333,000	\$97,599,600	\$113,866,200	\$130,132,800	\$146,399,400	\$162,666,000	\$178,932,600	\$195,199,200	\$211,465,800

For Eligible Resource Alternatives 1, 2, 8, 9 and 10 (ASSET BACKED)

Size of Nameplate bid in MW ⇒	100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1100	1101-1200	1201-1300
<b>Credit Rating</b>													
AAA/Aaa and above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA+/Aa1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA/Aa2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
AA-/Aa3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A+/A1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A/A2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
A-/A3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,465,800
BBB+/Baa1	\$0	\$0	\$0	\$0	\$0	\$0	\$13,866,200	\$30,132,800	\$46,399,400	\$62,666,000	\$78,932,600	\$95,199,200	\$111,465,800
BBB/Baa2	\$0	\$0	\$0	\$0	\$6,333,000	\$22,599,600	\$38,866,200	\$55,132,800	\$71,399,400	\$87,666,000	\$103,932,600	\$120,199,200	\$136,465,800
BBB-/Baa3	\$0	\$0	\$0	\$15,066,400	\$31,333,000	\$47,599,600	\$63,866,200	\$80,132,800	\$96,399,400	\$112,666,000	\$128,932,600	\$145,199,200	\$161,465,800
Below BBB-/Baa3	\$16,266,600	\$32,533,200	\$48,799,800	\$65,066,400	\$81,333,000	\$97,599,600	\$113,866,200	\$130,132,800	\$146,399,400	\$162,666,000	\$178,932,600	\$195,199,200	\$211,465,800



# Credit Matrix

## For Eligible Resource Alternatives 1, 2, 8, 9 and 10 (NON ASSET BACKED)

Size of Nameplate bid in MW ⇒	100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1100	1101-1200	1201-1300
<b>Credit Rating</b>													
AAA/Aaa and above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
AA+/Aa1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
AA/Aa2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
AA-/Aa3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
A+/A1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
A/A2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
A-/A3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,185,200
BBB+/Baa1	\$0	\$0	\$0	\$0	\$0	\$0	\$133,022,800	\$294,883,200	\$456,743,600	\$618,604,000	\$780,464,400	\$942,324,800	\$1,104,185,200
BBB/Baa2	\$0	\$0	\$0	\$0	\$59,302,000	\$221,162,400	\$383,022,800	\$544,883,200	\$706,743,600	\$868,604,000	\$1,030,464,400	\$1,192,324,800	\$1,354,185,200
BBB-/Baa3	\$0	\$0	\$0	\$147,441,600	\$309,302,000	\$471,162,400	\$633,022,800	\$794,883,200	\$956,743,600	\$1,118,604,000	\$1,280,464,400	\$1,442,324,800	\$1,604,185,200
Below BBB-/Baa3	\$161,860,400	\$323,720,800	\$485,581,200	\$647,441,600	\$809,302,000	\$971,162,400	\$1,133,022,800	\$1,294,883,200	\$1,456,743,600	\$1,618,604,000	\$1,780,464,400	\$1,942,324,800	\$2,104,185,200

## For Eligible Resource Alternative 11(a)

Size of Nameplate bid in MW ⇒	For a term of greater than 10 years			
	Up to 25	26 to 50	51 to 75	76 to 100
<b>Credit Rating</b>				
AAA/Aaa and above	\$0	\$0	\$0	\$0
AA+/Aa1	\$0	\$0	\$0	\$0
AA/Aa2	\$0	\$0	\$0	\$0
AA-/Aa3	\$0	\$0	\$0	\$0
A+/A1	\$0	\$0	\$0	\$0
A/A2	\$0	\$0	\$0	\$0
A-/A3	\$0	\$0	\$0	\$0
BBB+/Baa1	\$0	\$0	\$0	\$0
BBB/Baa2	\$0	\$0	\$0	\$0
BBB-/Baa3	\$0	\$0	\$0	\$0
Below BBB-/Baa3	\$40,465,100	\$80,930,200	\$121,395,300	\$161,860,400

Note 1: For Eligible Resource 11(a), the amount of credit assurances required in \$/kW equates to \$1,619/kW. Please note that the amount of credit assurances required for this resource type represents an "up to" amount depending on the terms of the curtailment and whether there is an acceptable physical asset behind the agreement.



# Credit Security Requirements Methodology

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## – Potential Credit Exposure

- ▶ Potential replacement energy cost to PacifiCorp in the event resource fails to come on-line when expected
  
- ▶ Asset-Backed Resource with Step-In Rights
  - Potential credit exposure is 12 months of replacement power costs
  - Summer (Jun-Sep) on-peak hours are of most concern, so these four months of replacement value are used in the measurement
  - For the 2012 Resource, this equates to \$162,666/MW
  
- ▶ Non-Asset-Backed Agreements
  - Potential credit exposure is the potential cost to replace contract at any point during the term of the contract
  - Requires simulation of future price distribution
  - For the 2012 Resource, this equates to \$1,618,604/MW

## Credit Security Requirements Methodology (continued)

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- Forward Price Uncertainty
  - ▶ Future price distributions are simulated using current forward price curves and price volatility curves
  - ▶ Future price levels are estimated using an 84% confidence level
  
- PacifiCorp’s Credit Risk Tolerance
  - ▶ Level of credit risk tolerance is determined for each credit rating, each category of Eligible Resource, and each resource term
  - ▶ Amount of credit assurances to be provided is the difference between the potential credit exposure and the level of credit risk tolerance
  
- Value of Credit Assurances
  - ▶ Security amounts required in the credit matrix may include a combination of letters of credit, parental guaranties, cash deposits, or other security deemed acceptable by PacifiCorp

# Overview of the Request for Proposal

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## – Request for Proposal

All Eligible Resources in the 2012 RFP **must** be a minimum of 100 MW and for a term not less than 5 years.

### ▶ Eligible Resources may include the following:

#### 1. Power Purchase Agreements

- » Fixed price – capacity and or energy
- » Base load resource may include geothermal, biomass, hydro based resource.

#### 2. Tolling Agreement

- » Index to power – physical and or financial
- » Index to gas – physical and or financial
- » Index to coal – financial

#### 3. Engineering Procurement Contract for Currant Creek site only

#### 4. Asset Purchase and Sales Agreement at the Currant Creek or Lake Side site

# Request for Proposal

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5. Asset Purchase and Sale Agreement (APSA) at Bidders site  
APSA for Gas projects – fuel supply, performance requirements and operating and maintenance agreements  
APSA for Coal projects- fuel supply, performance requirements and operating and maintenance agreements
6. Purchase of an existing facility (subject to due diligence requirements)
7. Purchase of a portion of an existing facility, jointly owned or operated by PacifiCorp (subject to due diligence requirements)
8. Restructure of an existing Power Purchase Agreement (PPA) or an existing Exchange Agreement.
9. IGCC Proposals
10. Geothermal and or Biomass Power Purchase Agreements
11. Eligible Exceptions to 100 MW minimum are (however term of not less than 5 years still applies):
  - Physical Load Curtailment – 25 MW minimum
  - Qualified Facilities 10MW or greater

## Request for Proposal - Point (s) of Delivery (POD)

- Within the Eastern Control Area – the points of interconnection between the resource, or electrical system to which the resource is connected, and PacifiCorp’s Utah network transmission system
- Mona 345 kV
- Nevada/Utah Border on Gonder 230 kV
- Glen Canyon 230 kV
- Four Corners 345 kV
- Nevada Utah Border (NUB) on Red Butte 345kV
- Located in Nevada - PacifiCorp is willing to purchase capacity and associated energy that is sourced from Nevada; provided, the selling entity is able to secure firm transmission and operating reserves from the resource to either Gonder or NUB
- Crystal 500kV – provided PacifiCorp Transmission includes it as a valid network point of delivery
- Wyoming - POD must be electrically south of Naughton-Monument.

**Note:** all incremental delivery costs, interconnection costs and or integration costs will be considered in economic analysis. Most POD’s will require a system impact study.

## Pricing Input Sheet

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- The Form 1 Pricing Input Sheet is an interactive Excel spreadsheet.
  - ▶ Provides critical inputs that will be used for the financial evaluation of each bid.
  - ▶ It is critical to that bidders enter inputs by order of Field ID.
  - ▶ Selections made in Field ID 1 (Resource Category; e.g. Power Purchase Agreement, Tolling Service Agreement, etc) and Field ID 2 (Resource Type; e.g. Coal, Combined Cycle, IGCC, etc) will determine the remaining input fields that will require data entry.
  - ▶ A definitions sheet is included with the Pricing Input Sheet – definitions are cross-referenced by Field ID
- An electronic version of the Pricing Input Sheet must be submitted for each bid or bid will be rejected and returned to the IE
  - ▶ To the extent that information does not conform to the Pricing Input Sheet, bidders are to supplement the additional information
- The Form 1 Pricing Input Sheet can be downloaded from the IE website at: [www.merrimackenergy.com/PacifiCorp2012RFP/index.asp](http://www.merrimackenergy.com/PacifiCorp2012RFP/index.asp)

# Evaluation Overview

## – Evaluation will be completed in a four step process:

### ▶ Step 1: Initial Short List Analysis

- By Eligible Resource Category, an initial short list will be determined based on Price and Non-Price factors.

## – Consistent with Integrated Resource Planning:

### ▶ Step 2: Portfolio Development/Optimization

- Using the initial short list and the company's benchmark resources, Global Energy Decision's Capacity Expansion Module (CEM) will be used to develop optimized portfolios under various assumptions for future emission costs and market prices.

### ▶ Step 3a: Stochastic Analysis

- Global Energy Decision's Planning and Risk (PaR) model will be used in stochastic mode to develop expected PVRR and PVRR risk measures for each optimized portfolio.

### ▶ Step 3b: Deterministic Scenario Analysis

- To evaluate scenario risk, CEM will be used to calculate the deterministic results of each optimized portfolio for each of the future scenarios used in Step 2.

## – Step 4: Final Selection

- Consistent with Utah Energy Resource Procurement Act and Oregon Guideline 10(d)

## – Analysis Conclusion:

- ▶ The resources in the highest performing (least cost, adjusted for risk) portfolio will advance to contract negotiations.

# Initial Shortlist Screening

## – Step 1: Initial Shortlist Bid Evaluation - RFP Base Model

### ▸ Price - 70% weighting

- Bidders must fix 60% of the price with the ability to float up to 40 percent the capital costs, up to 25 percent to Consumer Price Index and 15 percent to Producer Price Index- Metals and Metal Products.
- The cost and index will become fixed the earlier of: financing, signing of the engineering and procurement contract or two years from the signing of the transaction;
- Comparison metric will be the Net Present Value Revenue Requirement per kilowatt-month (Net PVRR/kW-mo).
  - » Real levelization and the equivalent annuity method will be utilized
  - » Bid metric  $\leq$  80% value receives 70% score
  - » Bid metric  $\geq$  120% value receives 0% score
  - » 80% value  $>$  bid metric  $<$  120% value receives linearly interpolated score between 0% & 70%.
- Includes transmission costs to integrate the resource and/or third party transmission if applicable.
  - » Transmission and or transportation costs currently available will be disclosed to bidders
- Emission costs will be included in the evaluation.

### ▸ Non-price - 30% weighting

- Development, feasibility/Risk (up to 10%)
- Site Control and Permitting (up to 10%)
- Operational Viability / Risk Impacts (up to 10%)

In the initial short list evaluation process, selects resources by fuel type within each eligible resource category for advancement to the next steps of the evaluation process

## Final Shortlist

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### – Step 2 Capacity Expansion Model – Production Cost Run

- ▶ Results of the initial shortlist (Step 1) along with the Company's Benchmark Resources will be used by CEM to develop optimized portfolios under various future scenarios – emissions and market prices.
- ▶ CEM will be used to develop optimized portfolios under various assumptions for future emission expense levels and market prices.
- ▶ An optimal portfolio will be established for each combination of emission and wholesale market and natural gas assumptions
- ▶ For each of the optimized portfolios, stochastic and deterministic scenario analysis will be performed using Planning at Risk (PaR) and Capacity Expansion Model (CEM)
  - » PaR - Expected PVRR and PVRR risk measures
  - » CEM - Deterministic PVRR for each future scenario

### – Step 3 – Risk Analysis

- ▶ The Planning and Risk Model and the Capacity Expansion Model will assess the risk to each portfolio
  - The PaR will model hydro conditions, thermal outages, gas prices, electricity prices and load on a stochastic basis.
  - The CEM will model CO<sub>2</sub>, fuel prices (natural gas and coal) and electricity prices on a scenario basis.

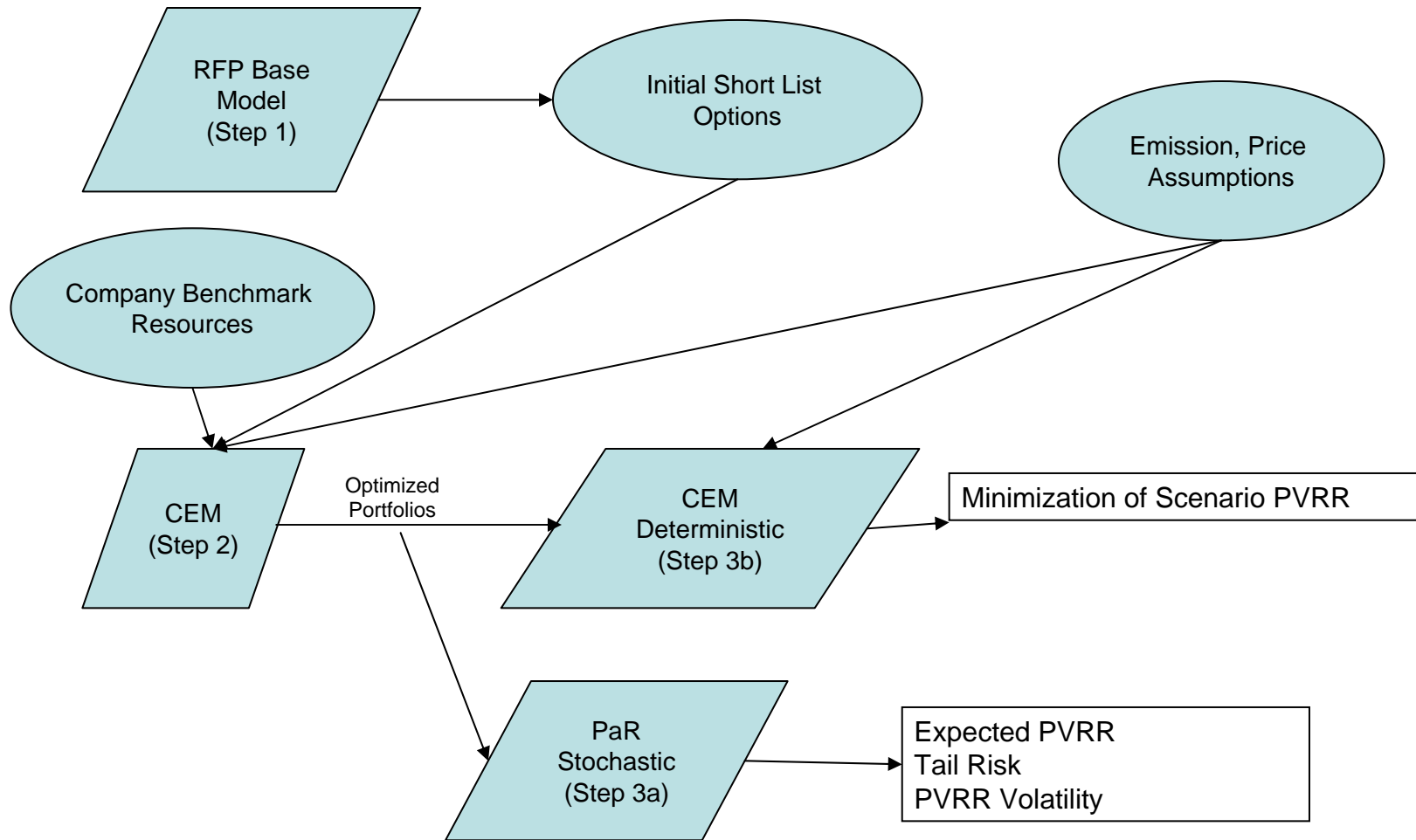
### – Step 4 – Final Selection



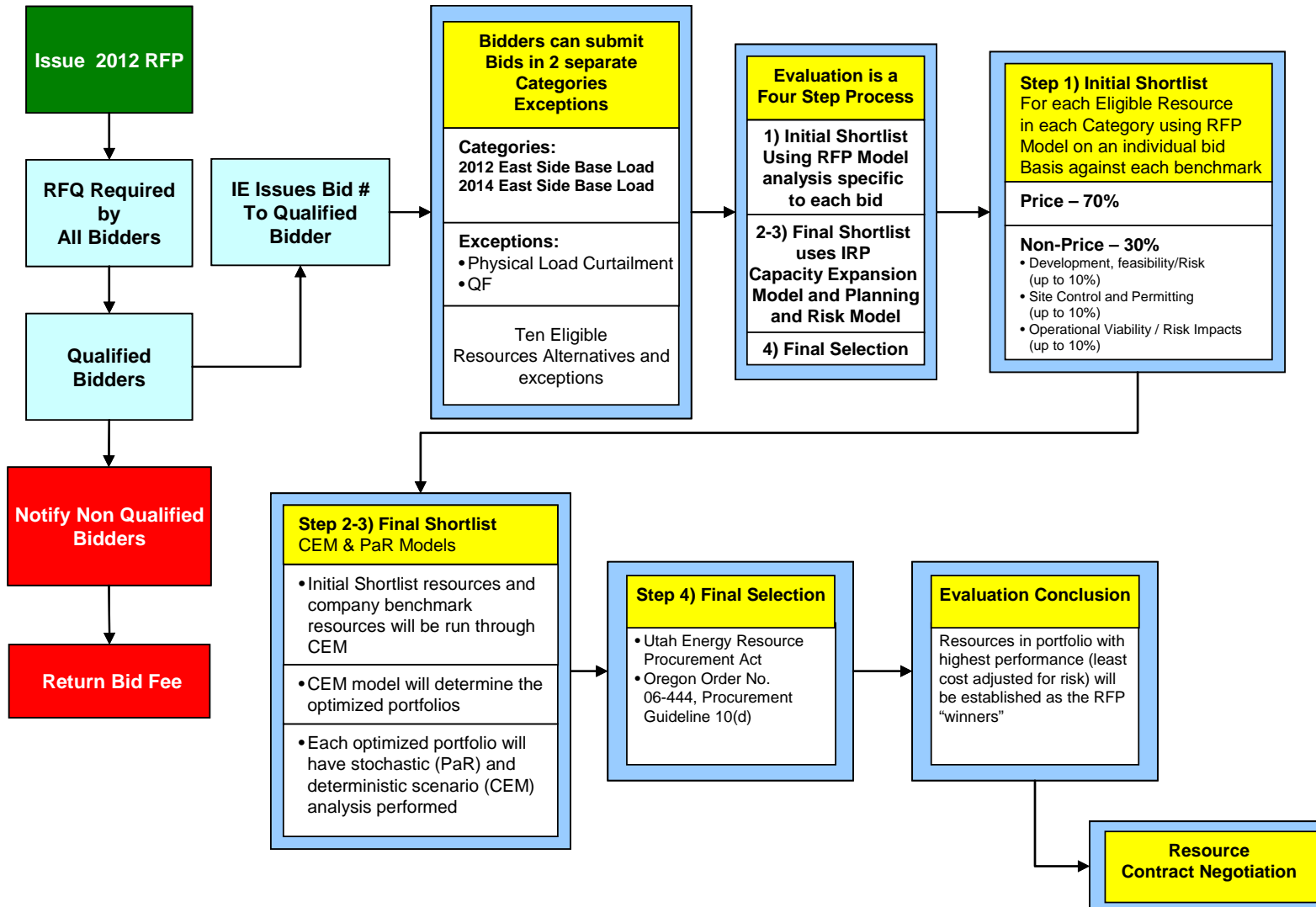
## Company Benchmarks

- The Company has included three benchmarks resources in the RFP, two pulverized coal benchmarks and one Integrated Gasification Combined Cycle (IGCC) benchmark
- The benchmarks are summarized in Attachment 1 of the RFP
  - ▶ The benchmarks Bidders must fix 60 percent of the price with the ability to float up to 40 percent the capital costs, up to 25 percent to Consumer Price Index and 15 percent to Producer Price Index- Metals and Metal Products.
  - ▶ The cost and index will become fixed the earlier of: financing, signing of the engineering and procurement contract or two years from the signing of the transaction.
- Benchmark Overview
  - ▶ 2012 Benchmark Resource
    - 340 MW of the 900 MW Intermountain Power Project Unit 3 – supercritical pulverized coal plant
  - ▶ 2014 Benchmark Resources
    - 527 MW of the nominal 790 MW Jim Bridger Unit 5 – supercritical pulverized coal plant
    - 500 MW (nominal) IGCC facility with 100 MW of natural gas duct firing capacity located at Jim Bridger

# Evaluation of Proposals – Modeling Methodology Summary



# Overall Process



## Questions/Comments & Information Sources

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RFP Questions and Answers  
Merrimack  
<http://www.merrimackenergy.com/>

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