

**2008R-1**  
**Renewable Request for Proposals**  
**Bid Conference**  
**October 23, 2008**



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

# Agenda

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- Overview
- Schedule for RFP 2008R-1
- Resource Requirements
- Overview of RFP 2008R-1
  - ▶ Bidder Fees
  - ▶ Delivery Points
  - ▶ Pricing input sheet
- Initial Shortlists
- Final Shortlists
- Residual or “Terminal Value”
- Credit Requirements

# Overview

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- RFP 2008R-1 was approved by the Oregon Public Utility Commission on September 23, 2008 (Order No. 08-476)
  - ▶ The Oregon PUC approved Boston Pacific as the Independent Evaluator
- Approval of the RFP 2008R-1 is not required in Utah
  - ▶ Utah Commission approved Merrimack as the consultant for the RFP 2008R-1
- PacifiCorp released the RFP to the market on October 6, 2008

# Anticipated Schedule for RFP 2008R-1

<b><u>Event</u></b>	<b><u>Anticipated Date*</u></b>
RFP issued	October 6, 2008
RFP bid conference	October 23, 2008
Intent to Bid Forms due	November 3, 2008
Responses due	December 22, 2008
Evaluation complete	March 9, 2009
Oregon Commission acknowledgement of Final Shortlist	April 9, 2009
Bidder negotiation complete	June 30, 2009
PacifiCorp decision	July 9, 2009

\* - Dates subject to change

# Resource Requirements

- Up to a total of 500 MW of Renewable Resources with a limit of 300 MW per resource/project
- Renewable Resources are defined as:  
An electric generation facility or generation capability or upgrade that becomes operational on or after January 1, 1995 that derives its energy from one or more of the following:
  - (A) wind energy;
  - (B) solar photovoltaic and solar thermal energy (i.e., concentrated solar);
  - (C) wave, tidal and ocean thermal energy;
  - (D) except for combustion of wood that has been treated with chemical preservatives such as creosote, pentachlorophenol or chromated copper arsenate, biomass and biomass byproducts, including
    - (I) organic human or animal waste;
    - (II) spent pulping liquor;
    - (III) forest or rangeland woody debris from harvesting or thinning conducted to improve forest or rangeland ecological health and to reduce wildfire risk;
    - (IV) agricultural residues;
    - (V) dedicated energy crops; and
    - (VI) landfill gas or biogas produced from organic matter, wastewater, anaerobic digesters or municipal solid waste;

## Resource Requirements (cont)

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(E) geothermal energy;

(F) certified low-impact hydro-electric energy with a nameplate capacity less than fifty megawatts, without regard to the date upon which the facility becomes operational, if the facility is certified as a low-impact hydroelectric facility on or after January 1, 1995, by a national certification organization;

(G) waste gas and waste heat capture or recovery;\*

(H) efficiency upgrades to a hydroelectric facility, without regard to the date upon which the facility became operational, if the upgrades become operational on or after January 1, 1995;

(I) geothermal energy if located within the state of Utah, without regard to the date upon which the facility becomes operational; or

(J) hydroelectric energy if located within the state of Utah, without regard to the date upon which the facility becomes operational.

\* PacifiCorp reserves the right to reject waste gas and waste heat capture or recovery

# Overview of RFP 2008R-1

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- Transaction Structures
  - (1) Power Purchase Agreement
    - with or without a Purchase Option
  - (2) Build Own Transfer
    - A Bidder may incorporate PacifiCorp-supplied turbines,
    - Turbine specifics will be provided to BOT Bidders who request them and execute a confidentiality agreement.
      - Note:** turbines will not be held for a particular bidder and are subject to prior sale, assignment or other use
  - (3) Asset Acquisition and Sale Agreement
- The Company will not be submitting a Benchmark for use in 2008R-1

## Overview of RFP 2008R-1

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- The Company is currently re-assessing the total cost associated with integrating intermittent resources, including costs associated with intra-hour deviations and/or system stability requirements:
  - ▶ PacifiCorp’s most recent study was in the 2007 IRP
    - Total integration cost assumed to be \$5.10 per MW/h (2007\$)
  - ▶ PGE has recently undertaking a similar study and BPA’s upcoming rate case will also re-assess integration costs;
    - For example, PGE estimates an integration cost of \$13.50/MWh (2014\$)
  - ▶ Resources connected to third-party transmission providers will include integration costs per current and anticipated tariffs;

# Overview of RFP 2008R-1 (cont)

- Delivery Points for the eastern and western control area
  - ▶ Eastern Control Area (PACE)
    - Salt Lake Valley
    - Mona 345 kV
    - Glen Canyon 230 kV
    - Nevada/Utah Border
    - Wyoming
    - Borah, Brady or Kinport if such resource is interconnected to PacifiCorp's Southwest Idaho electrical system near the Goshen 161 kV area.
  
  - ▶ Western Control Area (PACW)
    - Mid Columbia
    - Paul 500 kV
    - California Oregon Border
    - PACW System
      - Within the Western Control Area – The point of interconnection between the resource, or the electrical system to which the resource is connected, and PacifiCorp's transmission system.
      - Scheduled to the point (s) of interconnection between PacifiCorp's western control area and the Bonneville Power Administration or Portland General Electric such that transfer limitations are not exceeded. If the source located within the Bonneville the Bidder must show they have control area service from the resource to the delivery point.

# Overview of RFP 2008R-1

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- ▶ Relationship to RFP 2008R
  - RFP 2008R was issued on January 31, 2008 and is now closed
  - RFP 2008R-1 solicits online dates prior to December 31, 2011
  - RFP 2008R-1 will be evaluated incremental to the RFP 2008R
  
- ▶ Notice of Intent to Bid – Due November 3, 2008
  
- ▶ A resource in RFP 2008R-1 **must** be less than 300 MW but have an expected annual output of at least 25,000 MWhs per year
  
- ▶ PURPA Qualifying Facilities greater than 10MW are an exception and are eligible to participate

## Overview of RFP 2008R-1 (cont)

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- ▶ Proposed bidder fees
  - \$10,000 bid fee allows for one base proposal in addition to two alternatives
    - » Bidders will have the option of submitting up to three additional alternatives for a fee of \$1,000 per alternative
    - » Alternatives will be limited to different bid sizes, contract terms, in service dates, and/or pricing structures
  
- ▶ A Success Fee will be charged to successful bid(s).
  - The Success Fee will be assessed after the final amount of Bid Fees and the IE and Consultant costs are known, provided that in no event shall the Success Fee exceed \$300,000.00, plus escalation

## Overview of RFP 2008R-1 (cont)

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- Proposals which require third party transmission
  - If a third party transmission wheel is required in order to deliver to PacifiCorp's transmission system, the third party transmission details, including costs and availability, **must** be included in the proposal
- At this point in time and subject to the Independent Evaluator, the Company will manage the Q&A process, the documentation, amendments and or announcements
- All RFP 2008R-1 material and updates are currently located on PacifiCorp web site under: <http://www.pacificorp.com/Article/Article81264.html>
- Appendix K in the RFP 2008R-1 outlines the role and responsibility of the Independent Evaluator and the Consultant
- Appendix L provides the Company self-imposed code of conduct

# 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.
  - ▶ A Form 1 can be used for both the power purchase option, the build own transfer option, and the asset acquisition and sale option
  - ▶ The Pricing Input Sheet contains definitions which are cross-referenced by Field ID
  - ▶ Bidders must included pricing with and without extension of the Production Tax Credits post 2009
- 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

# Initial Shortlist

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- There will be three Initial Shortlists to capture location resource diversity and the different sources of renewable resources
  - ▶ There will be three Initial Shortlists
    1. west wind resources,
    2. east wind resources, and
    3. all other renewable resources
  
  - ▶ If provided, up to 500 megawatts or 5 viable bids will shortlist into each of the three Initial Shortlists
  
  - ▶ The three Initial Shortlists will then move to the Final Shortlist for further analysis

# Initial Shortlist Screening

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

### ▶ PRICE FACTOR EVALUATION (UP TO 70%)

- PacifiCorp will utilize the RFP Base Model to screen the proposals and to evaluate and determine the price ranking
- Comparison Metric - The comparison metric will be the projected net present value revenue requirement (net PVRR) per kilowatt month (Net PVRR/kW-mo)
- The net PVRR component views the value of the energy and capacity as a positive, and the offsetting costs are negative
  - » The more positive the net PVRR, the more valuable a given resource is to PacifiCorp's customers
  - » The percentage range of 80% to 140% may be adjusted based on the bids received

Bid Cost Relative to Adjusted Price Curves	Price Factor Weighting
Less than or equal to 80% of adjusted price projections	70%
Greater than 80% of adjusted price projections but less than 140% of adjusted price curves	Linearly interpolated
Equal to or greater than 140% of the adjusted price projection	0%

# Initial Shortlist Screening (cont)

- ▶ Non-price factor evaluation (UP TO 30%)
  - There are five non-price criteria
  - Each of the five non-price factor is weighted for a total of 6% each (for a total of 30%)
  - Each of the non price factors will be evaluated using point system - 1 through 5 (0%, 25%,50%,75%,100%)
  
- ▶ Non-Price Factors
  - 1)Conformity to RFP requirements - has the bidder provided all the requirements pertaining to their proposals in Appendix B, C-1,C-2 or C-3, D and J
  
  - 2)Conformity to pro forma PPA, BOT or Asset Acquisition and Sale Agreement- has the bidder required any additions or deletions that impose additional costs and or risks to customers
  
  - 3)Development and feasibility of proposal- Bids will be evaluated based on the quality of their proposal, their responsiveness to the information requested and demonstration of sufficient detail
    - ▶ Bidders are required to provide
      - » an environmental compliance plan and any environmental impact of each proposal consistent with the proposed technology
      - » demonstrate that the project can be reasonably developed within the appropriate timeframe to meet the proposed in service date and with limited risk to the customers
      - » achieved commercial operation demonstrated with a critical path schedule

# Initial Shortlist Screening (cont)

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4)Site control and permitting - bids will be evaluated based on the quality of their proposal, their responsiveness to the information requested and demonstration of sufficient detail on the status of permitting, and site control. Bids which can demonstrate little or no risk associated with these criteria will be more highly valued

5)Operational Viability - bids will be evaluated based on the quality of their proposal, their responsiveness to the information requested and demonstrate sufficient detail of their ability to comply with environmental permits and requirements and their operating experience with similar renewable projects and technology

- Bids will be evaluated based on their ability to demonstrate the proposal is thorough, comprehensive and provides limited risk to the customers prior to PacifiCorp performing due diligence on any given Bid
- Bids which have a demonstrated track record or are mature proposals will be more highly evaluated

# Final Shortlist

## – Step 2: Integrated Resource Plan – Final Shortlist

- ▶ The Company will use a production cost simulation system
- ▶ In determining the company's alternative, the Company first runs the production cost simulation system (the Planning and Risk, or PaR model) in stochastic mode using the then-current IRP preferred portfolio
- ▶ The PaR model is then run a second time with the uncommitted future renewable resources removed from the preferred portfolio
- ▶ The resulting production costs from this second model run reflect the market- and re dispatch-based energy costs incurred as a result of no longer adding renewable resources to the IRP preferred portfolio
- ▶ Next, other costs and benefits of the specific bid resource being considered are compared against the PaR model results. This comparison is in the form of a bid resource ACC value (“next highest Alternative Cost for Compliance”), which represents the resource cost, over the life of the project that yields a zero net PVRR difference with respect to the PaR model's market-based resource alternative

## Final Shortlist (cont)

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- ▶ The Company will evaluate the best 500 MW, which may include negative and positive ACC values
- ▶ If there are bids with positive ACC value, the Company may perform additional analysis to assess the market value of renewable energy credits, compliance with renewable portfolio standard requirements, and potential regulation of carbon dioxide emissions, consistent with the Company's acknowledged 2007 IRP
- ▶ Bids will be assigned extra value for expected capacity contributions over and above the generic proxy resources in the Company's IRP which are being replaced by the bids
- ▶ The capacity value will be determined by first calculating the difference in capacity contribution between a) the bidder's resource and b) the east or west side IRP proxy resource of the same size
- ▶ This incremental capacity contribution will then be multiplied by the annual carrying cost of a new simple-cycle combustion turbine
- ▶ Incremental capacity will be assessed for all resources, including geothermal, biomass, solar and wind resources

# Residual Value

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- Residual or “terminal value” will be assessed during the final shortlist evaluation:
  - Value will be ascribed to power purchase agreement proposals where PacifiCorp has the option to purchase the asset at the end of the power purchase term,
  - Value will be ascribed to Build Own Transfer proposals,
  - Value will be ascribed to Asset Acquisition and Sale Agreement proposals where appropriate
  
- The Company is in the process of hiring a consultant who will provide a methodology to determine terminal value which will be used during the Final Shortlist
  - ▶ This methodology will be shared with the Independent Evaluator and the Consultant prior to receiving bids in response to 2008R-1 RFP

# Credit Requirements

- Credit Requirements will be determined by:
  - ▶ Credit quality of the Bidder or the entity providing credit assurances on behalf of the Bidder
  - ▶ Type of Resource Category and Transaction Type
    - Power Purchase Agreement, Build Own Transfer, or Asset Acquisition and Sale Agreement
    - Power Purchase Agreements which must be backed by an asset
    - Power Purchase Agreements may or may not include a purchase option
  - ▶ Size of Resource and the number of MW to be delivered (nameplate MW multiplied by the capacity factor)
  - ▶ Date the renewable resource comes online
  
- The Credit Matrix included in Appendix D displays the maximum value of credit assurances required based on the factors above
  - ▶ Credit assurances may be provided in the form of a parental guaranty, a letter of credit, or cash escrow
  - ▶ Commitment letters to provide credit assurances on behalf of the Bidder will be required 20 business days after the Bidder is selected for the Final Shortlist

# Questions/Comments & Information Sources

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RFP Questions and Answers  
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**PacifiCorp Transmission**

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