



# Alcoa Perspective

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Service to Direct Service Industries  
BPA Regional Dialogue  
September 8, 2006



- World's Leading Aluminum Producer
  - 129,000 Employees in 43 Countries
- Owns 2 Northwest Aluminum Plants
  - Ferndale
    - Historically Relied on BPA Power
    - Currently Operating at 1/3 Capacity
  - Wenatchee
    - Historically Relied on BPA for Half of its Power
    - Currently Operating at 1/2 Capacity



# The Questions

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- What Factors and Impacts Should BPA Consider in Deciding the DSI Level of Service? (The Considerations)
- What Level of Service Should BPA Provide to Direct Service Industrial Customers After 2011 (The Answer)?



# The Considerations

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- Fairness
- Fairness
- Fairness
- Economics
- Other National Objectives



# Fairness

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- Why is Fairness so Important?
  - Allows Customer Support
  - Reduces Litigation
  - Leads to Certainty
  - Leads to Long-Term Stability
  - Allows Cooperation
    - Improves System Efficiency
    - Facilitates Resource Planning
    - Enables a United NW Response to Outside Threats



# Fairness

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- Why is Alcoa a DSIs?
  - Historical Serendipity
    - Alcoa first Aluminum Plant in 1940
    - Vancouver, WA
    - Clark PUD Did not Exist
    - Became Directly Served by BPA
    - Other Large Loads Followed (3000 aMW)



# Fairness

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- How Was Fairness Determined in the Northwest Power Act of 1980?
  - Allocation of BPA Power was Avoided
  - BPA Was Given Authority to Serve DSIs
  - BPA Was Required to Purchase to Meet Contractual Obligations (Including DSI Loads)
  - Rates Test to Preference Customers
    - Assumed DSI Loads Would Have Been Served by Preference Utilities (2800 MW)
  - This Was a Compromise that Worked for Preference Utilities, IOUs and DSIs



# Fairness

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- BPA is Now Proposing to Change the Balance Anticipated Under the Northwest Power Act.
- There is No Justification for Separating DSIs From Other Industries and Refusing Future Service On That Basis
- Fairness Demands that Aluminum Plants be Treated like other Industries





# Fairness

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- What Benefits Have Aluminum Companies Provided?
  - Justified the Timely Construction of Federal Hydroelectric and Transmission Systems
  - Lowered Rates to All BPA Customers
  - Paid For Much of the System Through Rates
  - Provided Metal for National Defense
  - Provided Economical Reserves
  - Provided Needed Northwest Employment



# Fairness

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- What is the Fair Level of Service?
  - Plants Need Enough BPA Power to Operate at High Production Levels
  - Customers are Concerned About BPA Rates
  - 560 MW of BPA Power to Aluminum Companies is Reasonable
    - Alcoa Alone Needs 625 MW
      - To Operate Both Plants at Capacity
      - In Addition to Existing Chelan PUD Amounts



# Fairness

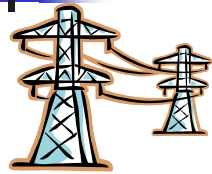
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- 560 MW is Reasonable
  - The Industry Once Used 3000 MW
  - It Will Give Us a Chance
  - Each Aluminum Company Should Have Access to the Entire Amount if Other Companies Do Not Operate
- With 560 MW, Other BPA Ratepayers Still See the Benefits of Over 2440 MW of DSI Load Reduction

# Economics

Major Cost Elements

A global commodity, with prices set on the London Metals Exchange (LME)



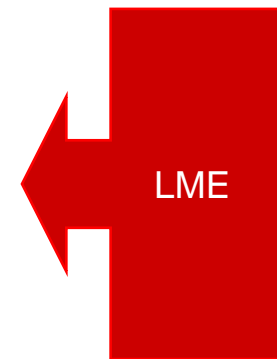
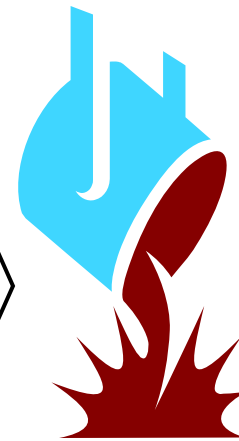
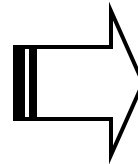
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Global Supply

Global Demand



# Economics

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- Alcoa Plant Economics
  - Short-Term (2006-2011)
    - “Financial Benefits” Contract
    - Rates for Intalco - \$36/MWh to \$52/MWh
    - 33% to 92% Higher Than BPA Rate to Utilities
    - High Short-Term Aluminum Prices Allow Operating to Bridge the Gap to 2011



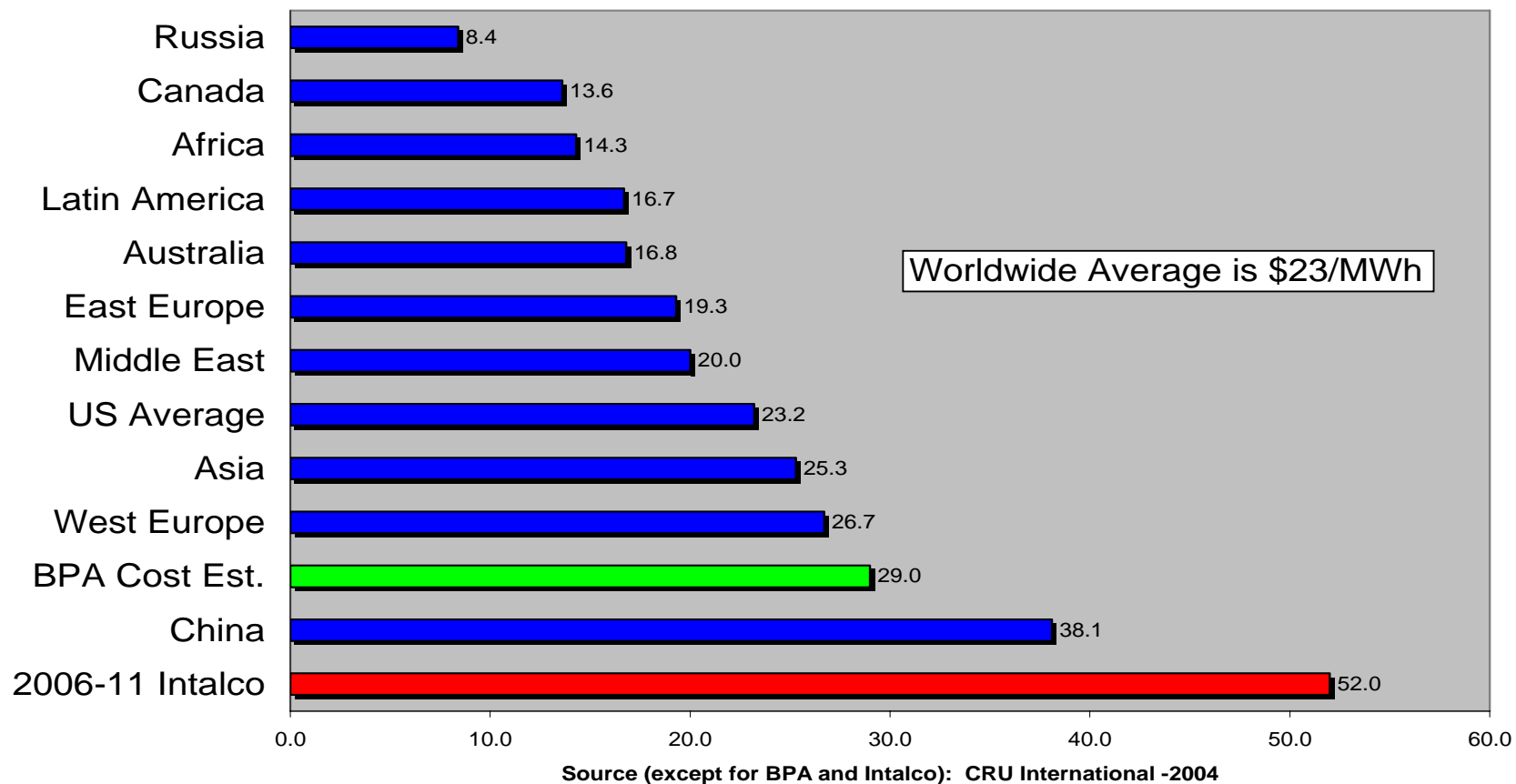
# Economics

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- Alcoa Plant Economics (Cont.)
  - Long-Term (After 2011)
    - World Aluminum Markets Are Growing
    - “Financial Benefits” Approach Will Not Work
    - CRU Strategies Predicts that:
      - With BPA Tier 1 Power
        - Both Alcoa Plants Will Run at Capacity
      - Without BPA Tier 1 Power
        - Intalco Plant Will Close
        - Wenatchee Will Depend on Chelan PUD

# Comparison of World Wide Aluminum Power Rates

Delivered Power Rate for Aluminum Smelters (\$/MWh)





# Economics

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- Alcoa Regional Economic Impacts 2005
  - 3,310 Total Jobs
    - 840 Direct
  - \$67 Million in Payroll
  - Potential for About 6,000 Jobs
    - Assuming Both Plants Run at Capacity
  - Important Economic Force in Our Communities





# Economics

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- Impacts on Others
  - Studies Looked at Potential BPA Rate Increases Necessary to Serve All Loads Including Aluminum Plants
  - Assumptions Were on High Side
    - BPA Would Still be Net Surplus in Most Years
  - Even Under “Upper Bound” Assumptions, Aluminum Job Gains Outpaced Job Losses



# Other National Objectives

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- Maintaining US Aluminum Production Will Maintain Manufacturing Jobs, Help the Balance of Trade and Strengthen the US Dollar
- Maintaining US Aluminum Production Will Reduce the US Dependence on Foreign Strategic Materials



# Other National Objectives

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- Environment
  - Aluminum Has The Potential to Reduce Global Greenhouse Gasses
    - Our Plants are Reducing GHG Emissions
    - 1 Pound of Aluminum in an Automobile Has the Potential to Eliminate 20 Pounds of CO<sub>2</sub> Emissions Over the Life of a Vehicle



# Other National Objectives

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- Environment (Cont.)
  - Recycling Aluminum Uses 5% of the Energy
  - About 75% of the 709 Million Metric Tons of Aluminum Has Been Produced Since 1888 is Still in Productive Use
  - Aluminum Has the Potential of Being “Climate Neutral” Before 2020
    - Transportation Savings Could Exceed Production Emissions



# Level of Service (The Answer)

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- BPA Should Use Up to 560 MW of Aluminum Plant Load When Establishing High Water Marks for Preference Utilities
- Aluminum Companies Should Purchase Power from Their Local Utilities Like Other Industries in the Northwest



# Conclusions

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- Fairness Dictates That Aluminum Loads Be Treated Like Other Industry Loads
- Fairness Says 560 MW is Reasonable
  - Gives Aluminum Companies a Chance
  - Limits Impacts on Other Customers
- Data Shows that 560 MW of Tier 1 Power to Aluminum Companies Will be Good for the Northwest Economy
- Other National Objectives Will Benefit by Continued Aluminum Production