PACIFICORP
INTERJURISDICTIONAL
COST ALLOCATIONS

NARUC STAFF SUBCOMMITTEE ON ACCOUNTING AND FINANCE
PORTLAND, OREGON
SEPTEMBER 11, 2013

DENISE PARRISH
WYOMING OFFICE OF CONSUMER ADVOCATE
DENISE.PARRISH@WYO.GOV
Truth is Stranger than Fiction

‘Tis strange, but true; for truth is always strange;
Stranger than fiction: if it could be told,
How much would novels gain by the exchange!
How differently the world would men behold!

Don Juan, by Lord Byron

Truth is stranger than fiction, but it is because Fiction
is obligated to stick to possibilities; Truth isn’t.

Mark Twain
PacifiCorp
Background

Service Area = 136,000 square miles

Customers = 1,754,000
   Industrial and Irrigation = 39%
   Commercial = 31%
   Residential = 29%
   Other = 1%
PacifiCorp Background

Percent of Total – Customers and Energy Sales

- California: 3% (customers), 2% (energy sales)
- Idaho: 4% (customers), 7% (energy sales)
- Oregon: 32% (customers), 23% (energy sales)
- Utah: 46% (customers), 44% (energy sales)
- Washington: 7% (customers), 7% (energy sales)
- Wyoming: 8% (customers), 17% (energy sales)

Legend:
- Yellow: Number of Customers
- Brown: Energy Sales
PacifiCorp Background

GENERATION RESOURCES

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percent of Total Energy Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>60.37%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>0.40%</td>
</tr>
<tr>
<td>Hydro</td>
<td>8.42%</td>
</tr>
<tr>
<td>Wind</td>
<td>7.92%</td>
</tr>
<tr>
<td>Gas</td>
<td>12.16%</td>
</tr>
<tr>
<td>Biomass</td>
<td>0.43%</td>
</tr>
<tr>
<td>Other /Unspecified</td>
<td>10.29%</td>
</tr>
</tbody>
</table>
PacifiCorp Background

GENERATION RESOURCES 2013 (CAPACITY)

WEST CONTROL AREA – OR, WA, CA
- Thermal
- Hydro
- Class 1 DSM
- Renewable
- Purchase
- QFs

EAST CONTROL AREA – UT, WY, ID
- Thermal
- Hydro
- Class 1 DSM
- Renewable
- Purchase
- QFs
- Interruptibles
A Return to 1989….

Service Territory at the time of the Merger of Utah Power and Light & Pacific Power and Light

Taken from “Splitting Merger Benefits and Costs” by David Mosier and Stephen Ellenbecker, Public Utilities Fortnightly, 1990
1989: Merging Two Distinct Companies

<table>
<thead>
<tr>
<th></th>
<th>Pacific Power and Light</th>
<th>Utah Power and Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Retail Customers</td>
<td>670,000</td>
<td>510,000</td>
</tr>
<tr>
<td>Square Miles of Service Territory</td>
<td>63,000</td>
<td>90,000</td>
</tr>
<tr>
<td><strong>1998 Peak Load / Month</strong></td>
<td><strong>4,911 MW (February)</strong></td>
<td>3,169 MW (June)</td>
</tr>
<tr>
<td>Transmission Miles (≥ 132 kv)</td>
<td>6,880</td>
<td>7,722</td>
</tr>
<tr>
<td></td>
<td>Inexpensive Generation</td>
<td>Extensive Transmission</td>
</tr>
<tr>
<td></td>
<td>(Lower Retail Rates)</td>
<td>(Facilitate Sales to Southwest)</td>
</tr>
</tbody>
</table>

Taken from “Splitting Merger Benefits and Costs” by David Mosier and Stephen Ellenbecker, Public Utilities Fortnightly, 1990
1989: Merging Two Distinct Companies

<table>
<thead>
<tr>
<th>ENERGY SOURCE (GWH)</th>
<th>PP&amp;L</th>
<th>UP&amp;L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>22,401</td>
<td>18,917</td>
</tr>
<tr>
<td>Hydro</td>
<td>3,351</td>
<td>316</td>
</tr>
<tr>
<td>Purchases</td>
<td>4,167</td>
<td>1,580</td>
</tr>
<tr>
<td>Nuclear</td>
<td>158</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTALLED CAPACITY (MW)</th>
<th>PP&amp;L</th>
<th>UP&amp;L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>3,149</td>
<td>2,772</td>
</tr>
<tr>
<td>Hydro</td>
<td>863</td>
<td>175</td>
</tr>
<tr>
<td>Purchases</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nuclear</td>
<td>30</td>
<td>0</td>
</tr>
</tbody>
</table>

Taken from “Splitting Merger Benefits and Costs” by David Mosier and Stephen Ellenbecker, Public Utilities Fortnightly, 1990
1989: Expected Merger Benefits

The First Five Years: $500 Million in Expected Merger Benefits

- PP&L Winter Peak / UP&L Summer Peak
- PP&L Transmission runs east and west / UP&L Transmission runs north and south
- PP&L would be able to sell surplus power to the Southwest U.S.
- Increased flexibility in the maintenance of generating plants
- Elimination of duplications and reductions in inventories
Merger Commitments and Expectations

UP&L expected to cut rates 5% - 10% in the first five years

Immediate reduction of 2% (non-cost based)

PP&L expected to maintain “stable” rates over the first five years

...consolidation of the Pacific Power and Utah Power properties may be accomplished after the initial five-year term of the merger when the PacifiCorp Oregon utility operating divisions show a similar cost of service...

Wyoming PSC Merger Order dated 2/24/88, page 12
Merger Promises

...Applicants have committed indefinitely that Pacific’s customers will not be harmed by the merger and will not subsidize benefits to Utah Power customers...

Oregon PUC Order 88-767, page 22
Utah PSC Guidance re: Merger Allocations

...we urge the Applicants to seek an allocation method which does not involve inter-divisional allocation but allocates system revenues and costs directly to state jurisdictions and FERC. Applicants should be guided by three general principles:

◦ First, the proposed allocation methods should avoid total reliance on stand-alone modeling.

◦ Second, the proposed methods should embody a consistent and equitable method of allocating the benefits derived from the uniquely valuable assets of each division, in particular, the strategically located Utah Power transmission system and the low-cost power production of Pacific Power.

◦ Third, an allocation model should be verifiable against actual data.

Utah PSC PacifiCorp/UP&L Merger Order, pages 66-67
(Order clarifies that this discussion applies to allocations for 1989 – 1993)
Allocation Tensions: 1989…and Still Today

PACIFIC POWER AND LIGHT STATES

Cheap Hydro = Cheaper Retail Rates

Why should we share these with Utah Power states?

UTAH POWER AND LIGHT STATES

When will we act like one integrated utility?
### The 1990’s: Consensus Method & PITA Accord

#### INTRODUCTION OF THE HYDRO ENDOWMENT AND TRANSMISSION ENDOWMENT

<table>
<thead>
<tr>
<th>Category</th>
<th>Allocator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Merger Plant</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
</tr>
<tr>
<td>Post Merger Plant</td>
<td>System</td>
</tr>
<tr>
<td></td>
<td>(75% System Capacity and 25% System Energy)</td>
</tr>
<tr>
<td>Conservation</td>
<td>Each State Pays its Own</td>
</tr>
<tr>
<td>Hydro Plant &amp; Expense</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
</tr>
<tr>
<td>Hydro Capacity and Expense</td>
<td>Remove the capacity (kW) and energy (kWh)</td>
</tr>
<tr>
<td></td>
<td>provided by Company owned hydro from the</td>
</tr>
<tr>
<td></td>
<td>system allocation factors</td>
</tr>
<tr>
<td>Firm Transmission Revenue</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
</tr>
</tbody>
</table>

**GOAL OF 50/50 SHARING OF THE PRESENT VALUE OF ACCUMULATED LONG TERM BENEFITS OF THE MERGER**
<table>
<thead>
<tr>
<th></th>
<th>Accord Method</th>
<th>Modified Accord Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Merger Plant</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
</tr>
<tr>
<td>Post Merger Plant</td>
<td>System (75% System Capacity and 25% System Energy)</td>
<td>System (75% System Capacity and 25% System Energy)</td>
</tr>
<tr>
<td>Hydro Plant</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
<td>Pre-Merger = Divisional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post Merger = System-wide</td>
</tr>
<tr>
<td>Hydro Endowment</td>
<td>Remove the capacity (kW) and energy (kWh) provided by Company owned hydro from the system allocation factors</td>
<td>Operating costs of the PP&amp;L and UP&amp;L division hydro systems compared to the operating costs of the PacifiCorp total system hydro system (per MWh); differences then credited back to each division as an offset to fuel costs</td>
</tr>
<tr>
<td>Firm Transmission Revenue</td>
<td>PP&amp;L / UP&amp;L Divisional</td>
<td>Eliminated</td>
</tr>
</tbody>
</table>
Utah Reaches a Breaking Point


- Inconsistent with restructuring and customer choice.
- Unrealistic to keep trying to compute the merger benefits years after the merger.
- Current allocation method moving away from rolled-in method (system-wide allocations) which is a more traditional allocation method.

Mixed reaction from other states – Utah sets rates using its own allocations – leaving a hole in cost recovery for the utility
December 1, 2000

- Application to Restructure Company
  - Six State Electric Companies
  - A Generation Company
  - A Transmission Company
  - A Service Company
Goals of the Corporate Restructuring Proposal

Lock in benefits of existing generation and continue to provide cost-based rates long-term.

Give each state independence in pursuing energy policies, including the type and timing of new generation resources.

Create a stable environment for investment in new generation.

Provide an opportunity for reasonable returns to company shareholders.

PROPOSAL WAS A NON-STARTER WITH MANY OF THE STATES.... BUT, BROUGHT EVERYONE BACK TO THE TABLE TO DISCUSS INTERJURISDICATIONAL ALLOCATIONS, AGAIN.
New Acronyms Accompany New Discussions

No longer PITA...but now MSP [Multistate Process]

2002 -- PacifiCorp seeks initiation of an investigation of inter-jurisdictional issues

No Consensus on

- How to allocate existing generation & transmission costs
- Who should bear costs of new resource additions
- What type of new resources should be added
- or much of anything else!
We Spent Two Years In Meetings… at the Monte Carlo Casino (plus a trip to Boise)
Discussions
Continue

Kathy Bates in Misery
Key Issues Identified

Primary Issues:
- Disproportionate Load Growth
- Treatment of the Hydro Resources

Secondary Issues:
- Assuring no state would suffer unbearable cost shifts
- Trying to build some sustainability or longevity into the agreement
The Multi-State (Revised) Protocol Agreement

Key Provisions – effective June 1, 2004

- Plan and operate its generation and transmission system on an integrated basis in a manner that achieves a least cost/least risk Resource Portfolio

- Just because a cost is assigned to a state, the state still has the right to examine the prudence of that cost for purposes of ratemaking

- Party no longer bound to support the agreement if the results materially depart from PacifiCorp’s current projections or the results otherwise no longer produce results that are just, reasonable, and in the public interest

- Created a Standing Committee (one representative from each state) to monitor need for revisions to the agreement
# The Multi-State (Revised) Protocol Agreement

## Key Provisions – Classification of Different Resources

<table>
<thead>
<tr>
<th>Resource Fixed Costs</th>
<th>Wholesale Contracts</th>
<th>Short-term Purchases and Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seasonal Resources</td>
<td>Company Owned Hydro</td>
<td>Mid-Columbia Hydro</td>
</tr>
<tr>
<td>Demand Side Programs</td>
<td>Portfolio Standards</td>
<td>Qualifying Facilities</td>
</tr>
<tr>
<td>System Resources</td>
<td>Transmission Costs and Revenues</td>
<td>Distribution</td>
</tr>
<tr>
<td>Administrative and General</td>
<td>Special Contracts</td>
<td>Gain / Loss from Sale of Assets</td>
</tr>
<tr>
<td>Freed-up Resources from Direct Access</td>
<td>Freed-up Resources Sale Approval</td>
<td>Loss or Increase in Load</td>
</tr>
</tbody>
</table>
The Multi-State (Revised) Protocol Agreement

Washington chose not to adopt this agreement and uses its own allocation method.

The remaining five states (UT, OR, WY, ID, CA) all adopted the Revised Protocol Agreement.
The Revised Protocol did not result in the anticipated allocation levels

- Example: Utah allocated revenue requirement higher than anticipated
- Other states were receiving fewer cost shifts than were anticipated

Utah still concerned that it was being allocated a greater set of costs than would be under a \textit{rolled-in} allocation scenario
2010 Protocol

Key Provisions

- Remain in effect for regulatory filings made through 2016
  - Support can be withdrawn if no longer produces *just and reasonable results*

- States had side agreements to limit the impact of the allocations
  - Wyoming
    - 2011 and 2012, capped the revenue requirement increase attributable to the change in allocation method (change of + or - 0.7%)
    - 2013 – 2016, capped the + or - change in revenue requirement attributable to different allocation to 0.55%

- Agreement to initiate a comprehensive analysis of allocation (BIG, BIG REVIEW)
  - Attempt to find a *permanent* principle-based solution

Editorial Comment

Allocators More and More Arbitrary // Less and Less Principle Based
2010 Protocol

CHANGES TO ACTUAL ALLOCATORS

- Eliminated separate allocation category for Seasonal Resources
- Create category of *State Specific Initiatives*
  - Costs assigned direct to the state – e.g., net metering, incentives, feed-in tariffs, electric vehicle rates, etc.
- Qualifying Facilities
  - System Resources UNLESS
    - If priced > comparable resources, then a portion of the cost assigned directly to the approving state
2010 Protocol

CHANGES TO ACTUALALLOCATORS

- Hydro Endowments (aka Hydro Embedded Cost Differential)
  - Special allocation arrangement for Klamath Dam Removal Surcharge Settlement

- Annual Company Owned Hydro Embedded Costs minus Annual Non-Hydro Pre-2005 Resources Costs multiplied by normalized MWH of output from Hydro Resources (Divisional)

- Mid Columbia River Contract Costs minus Annual Non-Hydro Pre-2005 Resources Costs multiplied by normalized MWh of output from Mid Columbia Contracts.
  
  - Each contract has its own allocator – some 100% to OR, some split to OR & WA, some divisional, etc.
2010 Protocol

Utah

Since the 2010 Protocol results were pretty close to the results of using Rolled-in, a side agreement allows Utah to use its preferred Rolled-in Method for its Rate Cases and Regulatory Filings.

Now, Utah (sort of) and Washington have broken away from the pack.
Current Discussions

Money, Money, Money

- Do Integrated System Benefits Still Exist?
- Structural Separation
- Cost Causation
- Direct Access

Growth in Loads and Peaks

- State Decision Making versus System Resource Needs
- We are happy with Rolled-in. Why change anything?
- Hydro – & the Costs that Go with It

Energy and Demand (Including Hourly Energy Information)

Data, Data, Data (oh, but how to Model all this)

Transmission: Should we consider allocating on End User Needs rather Than System Needs?
Current Discussions

We are in Year One of a discussion that will be measured in Years, not Months.

No trips to Vegas (or Boise) yet.
Regulatory Lag Record?

Nearly 25 years of working on the same issue

Is that a record for regulatory lag?
Please Help Us…

Is there a principle-based formulistic sustainable cost-based, SANE allocation method that you can recommend?