



# *Pricing Summary*

*March 5, 2002*



## *Design Objectives*

- *Avoid Price Increases and Cost Shifts*
- *Eliminate Transmission Rate Pancaking*
- *Honor Existing Contracts*
- *All Users Pay Some Fixed Costs*
  - Most of the fixed costs paid by load
- ***Challenge: Find a Balance Between Competing Objectives***



# *Two Elements of Transmission Service*

- ***Scheduling Reservation***
  - *Unrestricted Reservation Rights (URRs)*
    - *Unbounded in location, MW Blocks for a period*
    - *Payment is Transmission Reservation Fee (TRF)*
    - *FTO Credits included with URR purchase*
  - *Historic Reservation Rights (HRRs)*
    - *Bounded in both location and magnitude to rights under Pre-Existing Transmission Agreements and Obligations*
    - *Payment is Transfer Charges or Company Rate*
- ***Congestion Hedges***
  - *Financial Transmission Hedges (FTOs)*
  - *Catalogued Transmission Rights (CTRs)*



# *Transmission Services Offered*

- ***Transmission Use Service***
  - *For new or incremental service and for service under converted agreements & obligations*
- ***Non-Converted Transmission Service***
  - *Taken only by PTOs to meet their responsibilities under pre-existing agreements & obligations*
- ***RTO West Tariff applies to both services:***
  - *Grid Management Charge (GMC)*
  - *Losses and congestion cost*
  - *Ancillary Service requirements*

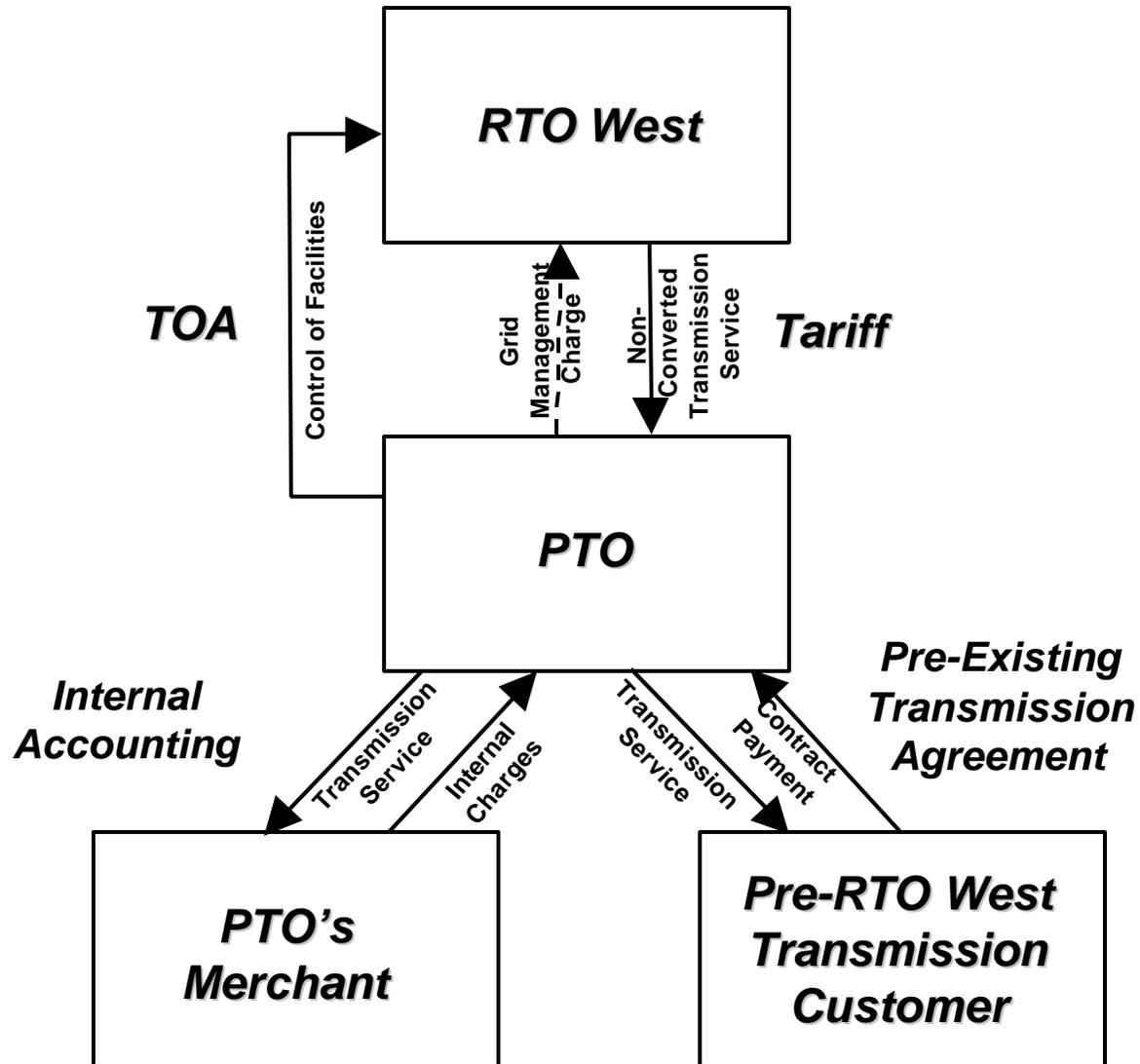


## ***Contractual Service Relationships***

- ***A pre-existing customer who chooses not to convert its contract remains a customer of the PTO provider.***
  - *PTO is the de-facto Scheduling Coordinator for all service under the pre-existing agreement*
  - *PTO's Customer has no relationship with RTO West*
- ***A pre-existing customer who chooses to convert an agreement becomes an RTO West Transmission Customer.***
  - *Converting customer either becomes a Scheduling Coordinator or designates one.*

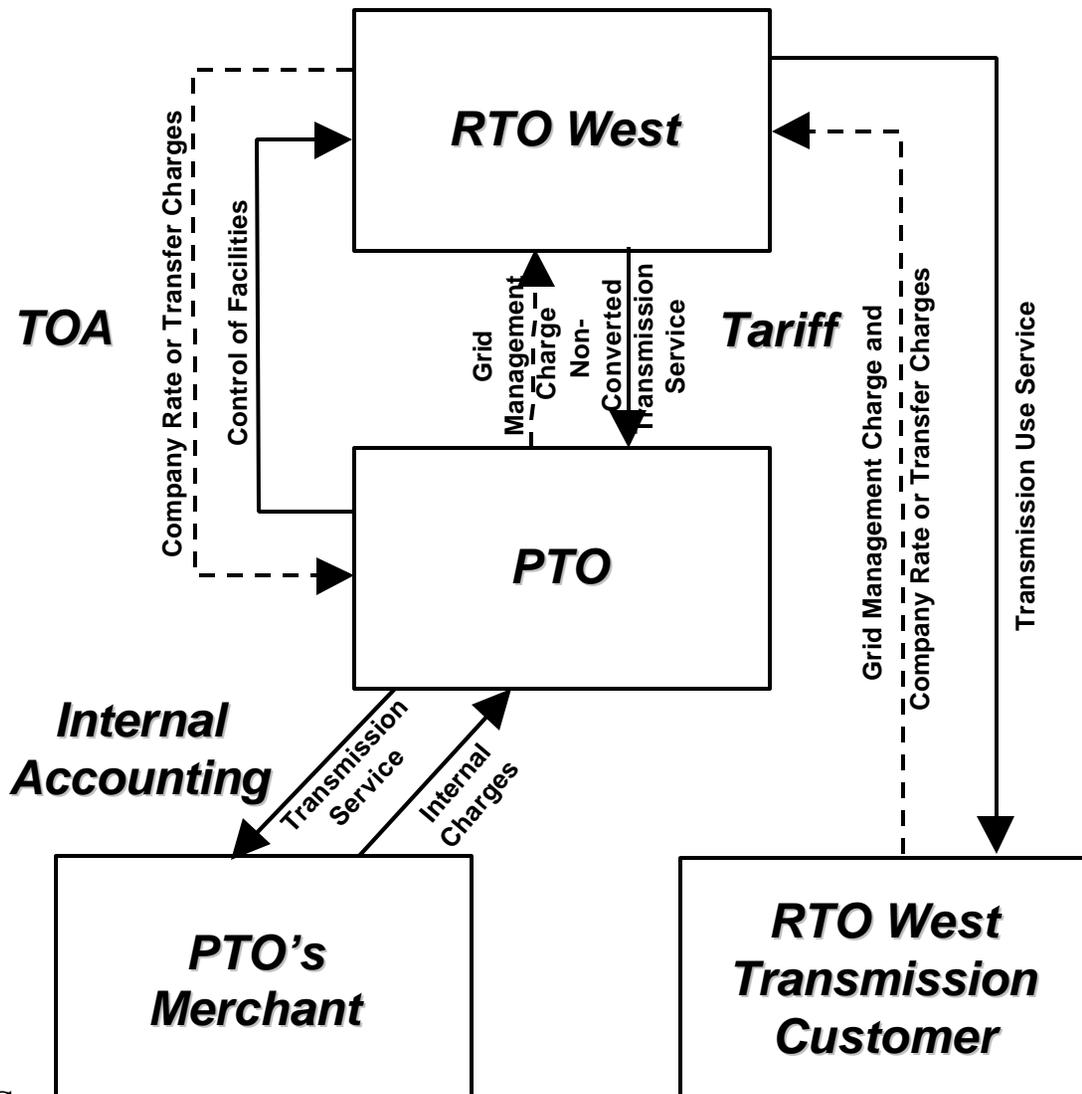


# Serving a Pre-Existing Transmission Agreement





# Contract Conversion to Transmission Use Service



- Notes:**
- 1) Payments to and from RTO West that pass through the Paying Agent are represented by dotted lines ( ← - - ).
  - 2) The PTO's Merchant may also choose to convert to Transmission Use Service



## *Transmission Use Service*

- ***Reservation Rights***
  - *Converted Agreement HRRs*
  - *Purchased URRs*
- ***Congestion Hedges***
  - *FTOs purchased*
  - *FTOs converted from CTRs (24 dispatches)*
  - *CTRs if by mutual agreement with PTO:*
    - *CTRs catalogued by PTO accepted*
    - *Agreement to release PTO from obligations*

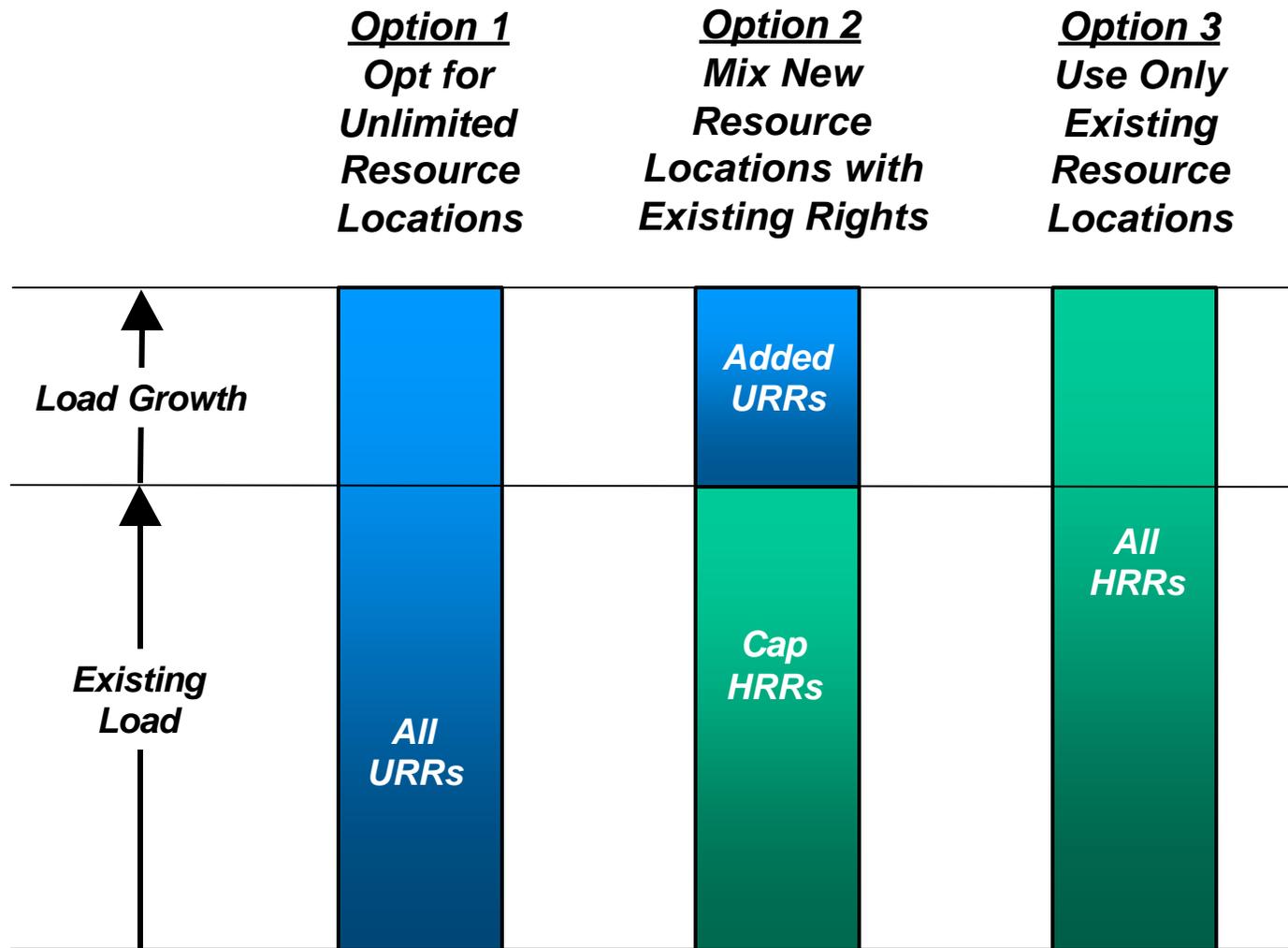


## ***Reservation Rights for Loads***

- ***All load must be covered by Reservation Rights:***
  - *Internal load must be covered by a combination of HRR and URRs purchased from RTO West with TRF equal to higher of “postage stamp” or delivery point Company Rate*
  - *Exports may use URRs purchased in secondary market*
- ***Converting internal load makes Reservation Rights selection to fit its future resources choices:***
  - *Switch resource providers—put all load under URRs*
  - *Keep old resources and buy at new locations for load growth—Keep existing load under HRR and buy URR for growth*
  - *Use existing resource locations for load growth—keep load under HRR if pre-existing agreement allowed for load growth otherwise put growth under URRs*



# Reservation Right Examples



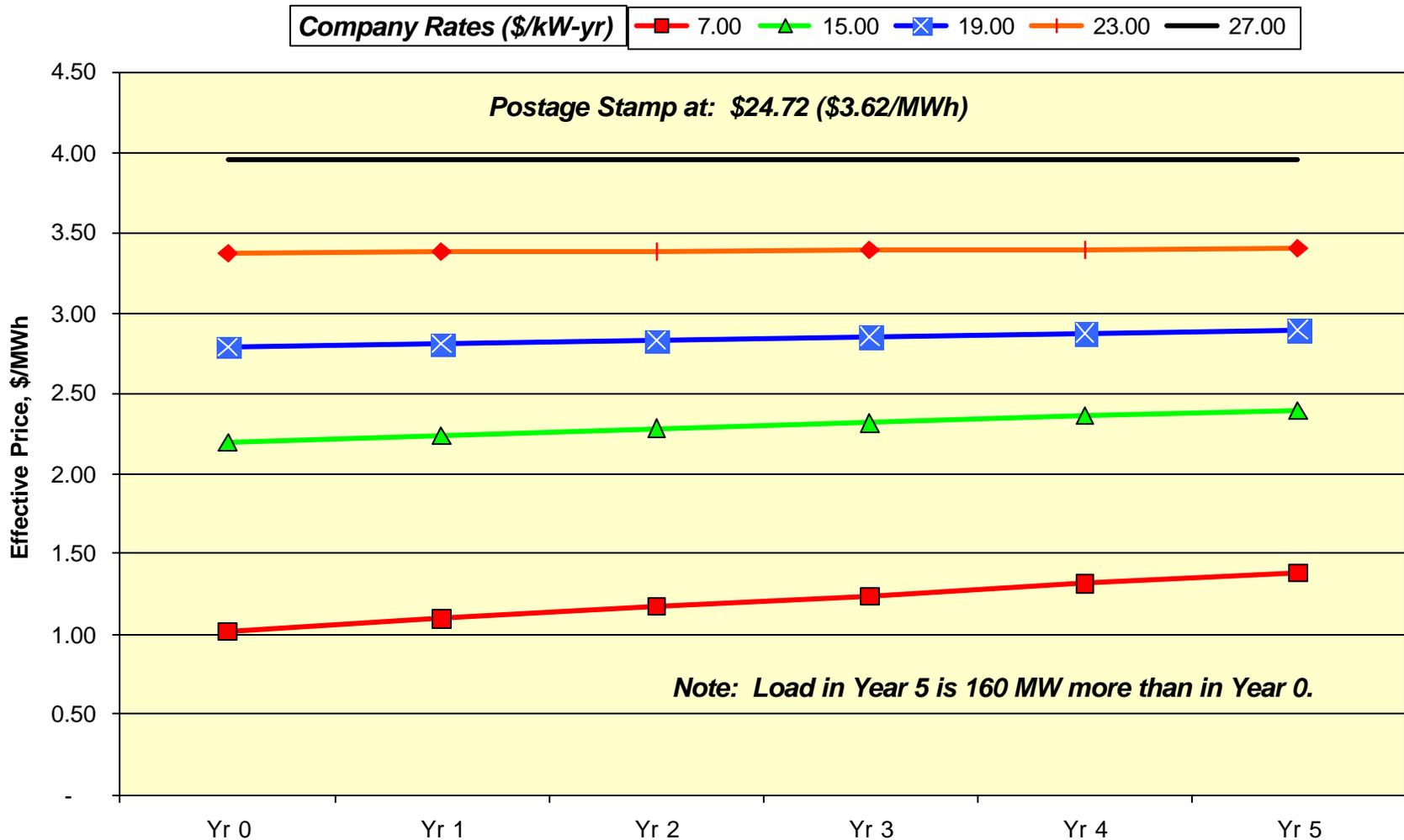


## ***Would Loads Opt for Growth URRs?***

- ***URRs provide unrestricted locations for acquiring new resources***
- ***Effective rate is weighted average of Company Rate for HRRs and TRF for URRs***
  - *Results in a modest increase in overall rate if growth on URRs, e.g. for 3% growth on 1000 MW, increase is less than \$0.50/MWh after 5 years for a party with the lowest Company Rate (see example on next slide).*
- ***Loads in higher cost areas have incentive to convert all load to URRs.***



**Price Effect for Mixed Reservation Rights At Various Company Rates**  
**Example: HRRs @ Company Rate for 1000 MW and**  
**URRs @ TRF for 3%/Year Load Growth**





## ***Reservation Rights for Generators***

- ***Load may schedule from any generator within its Reservation Rights' reach:***
  - *Any location up to URRs purchased*
  - *Identified locations with HRRs*
- ***Generators may buy URRs (primary or secondary market) and deliver to any location when loads Reservation Rights do not reach generators location:***
  - *Buyer receives FTO Credits—Used in day-ahead auctions*
  - *Exports may use secondary market URRs*



## ***Company Rates and Transfer Charges***

- ***Transfer Charges***
  - *Apply to Point-to-Point type agreements*
  - *Based on agreement's price provisions*
  - *May increase in during Company Rate Period if PTO opts for adjustments option at start-up*
- ***Company Rate***
  - *Apply to Network type agreements*
  - *Based on PTO's embedded cost*

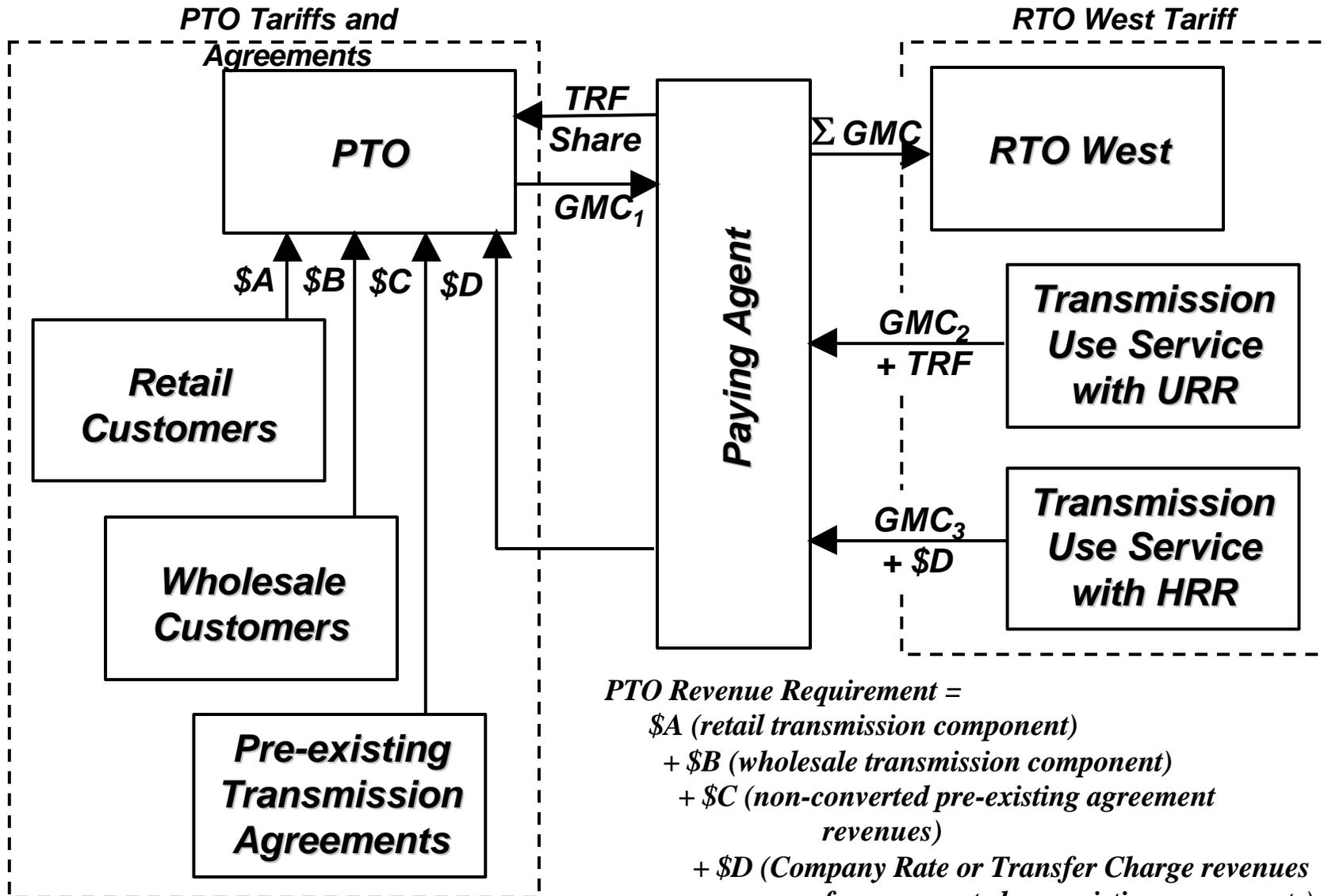


## *Company Rate Formula*

$$\begin{aligned} \text{Company Rate} = & \left\{ \begin{array}{l} \text{(Company Costs)} \\ \pm \text{(Net Transfer Charge Payments)} \\ - \text{(Revenue from Non-converted Agreement)} \\ + \text{(Cost of Non-converted Agreement)} \end{array} \right\} \\ & \hline & \text{Company Load} \\ & \text{Billing Determinants} \\ + & \left\{ \begin{array}{l} \pm \text{(New Facility Cost Sharing Payments)} \\ - \text{(TRF Allocation)} \\ + \text{(Company TOA Costs) ]} \end{array} \right\} \\ & \hline & \text{PTO Interconnected Load} \\ & \text{Billing Determinants} \end{aligned}$$



# Revenue Requirement Collection



**PTO Revenue Requirement =**  
 $\$A$  (retail transmission component)  
 $+$   $\$B$  (wholesale transmission component)  
 $+$   $\$C$  (non-converted pre-existing agreement revenues)  
 $+$   $\$D$  (Company Rate or Transfer Charge revenues from converted pre-existing agreements)



## ***Direct Retail Access Implications\****

- ***Like all other potential RTO West Customers, direct access customers may maintain pre-existing arrangements.***
- ***Direct access customers may also voluntarily convert to RTO West Service.***
  - *May opt for HRR or URR but total must equal customers total load*
  - *May opt for load growth in HRR if those rights are in pre-existing arrangements.*
  - *Must become or designate a Scheduling Coordinator*
  - *Other Tariff provisions apply: congestion, losses, and ancillary service.*

***\* Note: The provision of service for direct retail access is dependent upon state law or voluntary agreement by PTO consistent with state law.***



## *Summary of Comments*

### *Company Rate Approach*

- *Company Rate Period should be extended for period of 10 years after RTO West Service Commencement Date (PNGC, NRU, WPAG, PGP, Snohomish County PUD)*
- *Proposal focuses too much on avoiding cost shifts and too little on eliminating pancaking (SMUD)*



## ***Response***

### ***Company Rate Period***

- ***Filing Utilities remain committed to the minimize cost shift principle***
- ***The Company Rate Period will still end in 2011***



## ***Summary of Comments Transmission Reservation Fee***

- ***TRF will not accomplish its intended purpose:***
  - *Will not provide sufficient revenues to cover embedded costs*
  - *Will not provide sufficient revenues to avoid major cost shifts among customers*
- ***TRF is not appropriate (C-Facts, Dynegy, SMUD):***
  - *Contrary to comparability principle*
  - *Will set excessive barrier to short-term transactions and keep economic transactions from occurring*



## ***Summary of Comments Transmission Reservation Fee***

- ***Will distort location decisions for new generation (OOE, NWECC)***
- ***Congestion revenues are appropriate replacement for short-term wheeling revenue; TRF results in windfall to transmission owner***
- ***More specifics are needed regarding:***
  - *Historic footprint*
  - *Allocator (there are varying suggestions regarding reference year)*
- ***PNCA transactions should be required to pay TRF***



## ***Response:***

### ***Transmission Reservation Fee***

- ***TRF is part of balance of objectives***
  - *Load serving entities choice of new resources will dictate their selection type Reservation Rights for load growth*
  - *Loads taking URRs for growth have wider range of sources*
- ***Consideration being given to using congestion management surplus, if any, to supplement TRF Revenues and reduced TRF Rate***
- ***Reference year is still last year prior to operation***
  - *Helps deal with new service between now and startup*
- ***PNCA is a pre-existing agreement to be honored***
- ***HRRs (“footprint”) magnitude and location as specified in pre-existing agreements***



## ***Summary of Comments***

### ***Mechanics of Proposal***

- ***Losses treatment will not pass comparability test (Alberta)***
- ***There is a disconnect between adjustments of transfer payments based upon actual transmission costs with BPA pricing based upon forecasted costs (NRU, PNGC)***
- ***Clarification needed regarding what costs will be allowed to be recovered through GMC***



# *Response*

## *Mechanics of Proposal*

- ***Losses:***
  - *Unconverted agreements and obligations will follow the pre-existing provisions*
  - *Converted agreements and new service will use the methodology to be developed by RTO West*
- ***Adjustment of Transfer Payments:***
  - *Issue under discussion*



## ***Response***

### ***Mechanics of Proposal***

$$\begin{aligned} \text{GMC Rate} = & [ \text{O\&M Expense} \\ & + \text{Debt Service} \\ & + \text{Greater of ( Coverage Requirement} \\ & \quad \times \text{Senior Lien Debt Service) or} \\ & \quad \text{(Cash Funded Capital Expenditures)} \\ & - \text{Interest Earnings} \\ & - \text{Other Revenues} \\ & - \text{Reserve Transfer} ] \\ & \hline & [ \text{Annual Energy of Loads + Exports} ] \end{aligned}$$



## *Summary of Comments*

### *Application of Rates*

- *Decision to avoid cost shifts has disadvantaged wind generation and other renewable resources; these resources should be exempted from more onerous provisions or provided incentives)(ATNW, RR)*
- *Load should be defined as end-use customers' net load (not including load satisfied by on-site generation)(Independent Generators)*



## ***Response*** ***Application of Rates***

- ***Intermittent resources exemptions:***
  - *No decision yet, under discussion*
- ***Net load for on-site generation:***
  - *Research did not provide a clear precedent*
  - *Will be addressed later in tariff detail*



## *Summary of Comments*

### *Application of Rates*

- *Need clarification whether new load pays Company Rate or just TRF*
- *If facilities are currently included in transmission or transfer contracts for wholesale service, there should not be additional charges for use of such facilities*



## ***Response***

### ***Application of Rates***

- ***New load does not pay twice:***
  - *Either pays TRF is covered by URRs*
  - *Or pays Company Rate if covered by HRR (from converted contract with load growth included)*
- ***Facilities currently included in transmission or transfer contracts for wholesale service:***
  - *Unless the pre-existing agreement is converted to Transmission Use Service, the allocated share of facilities costs now in rate will remain in the bundled rate.*
  - *If a customer choose to convert or to take new incremental service, the allocated share of cost of facilities used will be recovered from new or converted service.*



## *Summary of Comments*

### *Follow-Up Steps*

- *Should prepare and provide pro forma estimate of expected implementation of pricing model*
- *Model should be released in Excel format*
- *Response: Will provided spreadsheets*