Power Rate Design Discount Model 3.0

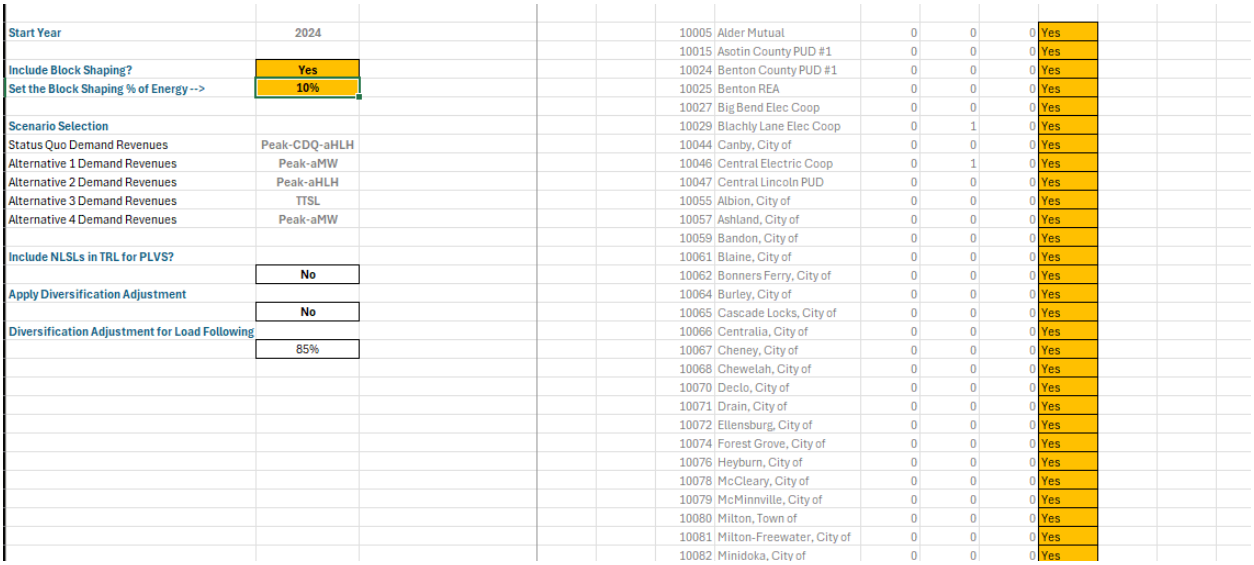
This model calculated Rate Impact Credits (RICs) under the assumption of Alternative 1 rate design developed in the PRDM and in consultation with the public. There are two rate discount programs: 1. RIC-C that covers the difference between marginal and embedded cost for Demand at the start of the contracts, and 2. RIC-M which mitigates any remaining rate impact to a defined cap or threshold.

This model has been updated for product elections and load forecasts from BP-26 Initial Proposal. Additionally, energy rates – which are modelled as Non-Slice only, have an added calculation of the implicit Composite Rate under the PRDM, where the Composite Rate is embedded into Non-Slice energy rates, such that Non-Slice loads pay Composite + Non-Slice energy rates with one combined monthly-diurnal rate set.

These energy rates (Non-Slice monthly diurnal rates with embedded Composite cost pool costs, and the Composite Rate) serve as inputs to the Product Choice model, which is designed to allow customers to input one annual load shape and estimate the effective rates under alternative Non-Slice product choices.

This separation will allow customers considering the Slice product to use a forecast Composite rate consistent with the other product comparisons.

Init



Start Year	2024
Include Block Shaping?	Yes
Set the Block Shaping % of Energy -->	10%
Scenario Selection	
Status Quo Demand Revenues	Peak-CDQ-aHLH
Alternative 1 Demand Revenues	Peak-aMW
Alternative 2 Demand Revenues	Peak-aHLH
Alternative 3 Demand Revenues	TTSL
Alternative 4 Demand Revenues	Peak-aMW
Include NLSLs in TRL for PLVS?	
	No
Apply Diversification Adjustment	
	No
Diversification Adjustment for Load Following	
	85%

10005	Alder Mutual	0	0	0	Yes
10015	Asotin County PUD #1	0	0	0	Yes
10024	Benton County PUD #1	0	0	0	Yes
10025	Benton REA	0	0	0	Yes
10027	Big Bend Elec Coop	0	0	0	Yes
10029	Blachly Lane Elec Coop	0	1	0	Yes
10044	Canby, City of	0	0	0	Yes
10046	Central Electric Coop	0	1	0	Yes
10047	Central Lincoln PUD	0	0	0	Yes
10055	Albion, City of	0	0	0	Yes
10057	Ashland, City of	0	0	0	Yes
10059	Bandon, City of	0	0	0	Yes
10061	Blaine, City of	0	0	0	Yes
10062	Bonners Ferry, City of	0	0	0	Yes
10064	Burley, City of	0	0	0	Yes
10065	Cascade Locks, City of	0	0	0	Yes
10066	Centralia, City of	0	0	0	Yes
10067	Cheney, City of	0	0	0	Yes
10068	Chewelah, City of	0	0	0	Yes
10070	Declo, City of	0	0	0	Yes
10071	Drain, City of	0	0	0	Yes
10072	Ellensburg, City of	0	0	0	Yes
10074	Forest Grove, City of	0	0	0	Yes
10076	Heyburn, City of	0	0	0	Yes
10078	McCleary, City of	0	0	0	Yes
10079	McMinnville, City of	0	0	0	Yes
10080	Milton, Town of	0	0	0	Yes
10081	Milton-Freewater, City of	0	0	0	Yes
10082	Minidoka, City of	0	0	0	Yes

Include Block Shaping? – This will enable the functionality to add shaping to the Block amount assumptions. Leave on for "yes" as default.

Set the Block Shaping % - applies a certain percent of the Tier 1 block energy which is eligible for shaping capacity.

Apply Diversification Adjustment – This applies a diversification adjustment to the CSP used for the demand billing determinant.

Diversification Adjustment for Load Following – This sets the value for the diversification adjustment assumption, and is only applied if "Apply Diversification Adjustment" is set to "Yes" above.

PLVS toggles -- adjust these values to Yes for a Block customer who plans on purchasing PLVS from BPA.

Rate Summary for Input into PCM

This sheet provides summary information in rate levels up front. Outputs include Load Shaping. Demand, Composite, Non-Slice, and Slice rates, as well as the RICc program cost in $/MWh. The RICc program cost is additive to the Non-Slice shaped energy rates. These are also inputs to the companion Product Choice Model.

BlockShaping

ections		Shaping Capacity (MW demand)													HLH/LLH Shape Adjustment (% HLH shift)											
		10	11	12	1	2	3	4	5	6	7	8	9		10	11	12	1	2	3	4	5	6	7	8
10005	Alder Mutual	0	0	0	0	0	0	0	0	0	0	0	0	10005	1	1	1	1	1	1	1	1	1	1	1
10015	Asotin County PUD #1	0	0	0	0	0	0	0	0	0	0	0	0	10015	1	1	1	1	1	1	1	1	1	1	1
10024	Benton County PUD #1	0	0	0	0	0	0	0	0	0	0	0	0	10024	1	1	1	1	1	1	1	1	1	1	1
10025	Benton REA	0	0	0	0	0	0	0	0	0	0	0	0	10025	1	1	1	1	1	1	1	1	1	1	1
10027	Big Bend Elec Coop	0	0	0	0	0	0	0	0	0	0	0	0	10027	1	1	1	1	1	1	1	1	1	1	1
10029	Blachly Lane Elec Coop	0	0	0	0	0	0	0	0	0	0	0	0	10029	1	1	1	1	1	1	1	1	1	1	1
10044	Canby, City of	0	0	0	0	0	0	0	0	0	0	0	0	10044	1	1	1	1	1	1	1	1	1	1	1
10046	Central Electric Coop	0	0	0	0	0	0	0	0	0	0	0	0	10046	1	1	1	1	1	1	1	1	1	1	1
10047	Central Lincoln PUD	0	0	0	0	0	0	0	0	0	0	0	0	10047	1	1	1	1	1	1	1	1	1	1	1
10055	Albion, City of	0	0	0	0	0	0	0	0	0	0	0	0	10055	1	1	1	1	1	1	1	1	1	1	1
10057	Ashland, City of	0	0	0	0	0	0	0	0	0	0	0	0	10057	1	1	1	1	1	1	1	1	1	1	1
10059	Bandon, City of	0	0	0	0	0	0	0	0	0	0	0	0	10059	1	1	1	1	1	1	1	1	1	1	1
10061	Blaine, City of	0	0	0	0	0	0	0	0	0	0	0	0	10061	1	1	1	1	1	1	1	1	1	1	1
10062	Bonners Ferry, City of	0	0	0	0	0	0	0	0	0	0	0	0	10062	1	1	1	1	1	1	1	1	1	1	1
10064	Burley, City of	0	0	0	0	0	0	0	0	0	0	0	0	10064	1	1	1	1	1	1	1	1	1	1	1
10065	Cascade Locks, City of	0	0	0	0	0	0	0	0	0	0	0	0	10065	1	1	1	1	1	1	1	1	1	1	1
10066	Centralia, City of	0	0	0	0	0	0	0	0	0	0	0	0	10066	1	1	1	1	1	1	1	1	1	1	1
10067	Cheney, City of	0	0	0	0	0	0	0	0	0	0	0	0	10067	1	1	1	1	1	1	1	1	1	1	1
10068	Chewelah, City of	0	0	0	0	0	0	0	0	0	0	0	0	10068	1	1	1	1	1	1	1	1	1	1	1
10070	Declo, City of	0	0	0	0	0	0	0	0	0	0	0	0	10070	1	1	1	1	1	1	1	1	1	1	1
10071	Drain, City of	0	0	0	0	0	0	0	0	0	0	0	0	10071	1	1	1	1	1	1	1	1	1	1	1
10072	Ellensburg, City of	0	0	0	0	0	0	0	0	0	0	0	0	10072	1	1	1	1	1	1	1	1	1	1	1
10074	Forest Grove, City of	0	0	0	0	0	0	0	0	0	0	0	0	10074	1	1	1	1	1	1	1	1	1	1	1
10076	Heyburn, City of	0	0	0	0	0	0	0	0	0	0	0	0	10076	1	1	1	1	1	1	1	1	1	1	1
10078	McCleary, City of	0	0	0	0	0	0	0	0	0	0	0	0	10078	1	1	1	1	1	1	1	1	1	1	1
10079	McMinnville, City of	0	0	0	0	0	0	0	0	0	0	0	0	10079	1	1	1	1	1	1	1	1	1	1	1
10080	Milton, Town of	0	0	0	0	0	0	0	0	0	0	0	0	10080	1	1	1	1	1	1	1	1	1	1	1
10081	Milton-Freewater, City of	0	0	0	0	0	0	0	0	0	0	0	0	10081	1	1	1	1	1	1	1	1	1	1	1
10082	Minidoka, City of	0	0	0	0	0	0	0	0	0	0	0	0	10082	1	1	1	1	1	1	1	1	1	1	1

Input on this tab under your respective utility the amounts of shaping capacity (in MW) for each month being considered, and for the amount believed to be possible. Similarly, you can increase of decrease the HLH/LLH shaping by inputting a value from 0.1 to 1.5 or so (you cannot go too high because there may not be enough LLH energy to take out of LLH and put into HLH). As an example, a value of 1.1 you place 10% more energy in HLH than LLH on an aMW basis.

PLVS This does the simple calculation of the PLVS rate. TRL amounts are live with the election for service (default is no block customers taking it); but the capacity assumption is not live yet.

TOCA | TRL | NLSL | Tier1 | CSP | Existing | Forecast Rates

These are user inputs from The TRMbd (currently for the BP-24 rate period), augmented for certain clean-up items on the load forecast, and assuming no Slice product. That is the Tier 1 amounts are as if the customer was block only.

Staging The aforementioned inputs are all fed into these this staging table and used for the rate calculation in the model.

Rate Calculations

Revenue Requirement Calculates the Revenue Requirement assumed in rate calculations – this will be sourced from RAM in BP-29 for the actual calculation. It assumes no Slice.

Demand Revenues Marginal | Demand Revenues Embedded | PLVS Revenues | Energy Rates Marginal Demand | Energy Revenues | Customer Tier 1 Energy

These sheets perform the scenario based calculations for Status Quo and the two alternatives using a diurnal rate setting approach. They feed into the Effective Rates tab below. The Energy Rates Marginal Demand sheet has an implicit Composite Rate calculation added to show the PRDM design change of embedding the Composite Rate into shaped Non-Slice rates discussed in the 7(i) process. Because this workbook assumes all loads are Non-Slice for the purposes of the rate discount calculations (RICc and RICm) there is no change to the effective Non-Slice energy rates from the previously posted version 2.0.

Effective Rates This tab is effectively the results tab and performs the discount calculations subject to settings on the "RIC-M Temporal Calcs" tab for the start % rate impact cap.

RIC-M Temporal Calcs | RIC-M Temporal Calcs Annual These tabs perform calculations based upon user inputs. The inputs are in "RIC-M Temporal Calcs" and are shown and discussed below. The only other difference between these two tabs is whether the time units are rate periods on years.

First set the beginning period cap for the credit. This is input as a number, so 0.02 means a 2% cap. Any rate impact amount above this level will be mitigated by RIC-M credits and paid for by RIC-M charges.

Choose the method of decay – if you select $/MWh, the credit for each customer will be reduced by the entry under "For $/MWh decrease by what amount per period" amount over time (either each rate period or annually depending on which Customer Dashboard and method of application of the credit declination.

Discount Programs Over The Term of Provider of Choice

Beginning Period Cap for Credit	0.02	*This sets the Credit Cap on Effective Rates and Elsewhere*
		Refresh the Charge Floor for new Beginning Period Cap
Decrease by $/MWh or %? -->	$/MWh	
For $/MWh decrease by what amount per period -->	0.1	
For % what method of decline	straight-line/average	*Not Used, only applies to % mode*
End Period Cap for Credit	0.05	*Not Used, only applies to % model*

If you select "%" for the method of decay, the $/MWh value entered will no longer be used. Instead, input either "straight-line/average" or "logarithmic" as the decline shape and select an end-of-contract cap on the rate increase imposed by PRDM. This is input as a number, so 0.05 means a 5% cap.

Discount Programs Over The Term of Provider of Choice

Beginning Period Cap for Credit	0.02	*This sets the Credit Cap on Effective Rates and Elsewhere*
		Refresh the Charge Floor for new Beginning Period Cap
Decrease by $/MWh or %? -->	%	
For $/MWh decrease by what amount per period -->	0.1	*Not Used*
For % what method of decline	straight-line/average	
End Period Cap for Credit	0.05	

If you change the cap for the credit, then you will likely need to run the macro entitled "Refresh the Change Floor for new Beginning Period Cap" to reset the floor for the RIC-M Charges. This will determine the maximum amount of rate decrease for those paying for the RIC-M program. That macro will change the value in cell G3 on the Effective Rates tab.

Bar Charts

This tab develops two charts – one showing the effective rates after RICs and another showing the % impact for first period associated with PRDM after RICs and cap/floors have been applied.