



MISO/PJM Cross Border Cost Allocation

October 21, 2008
Carmel, IN



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 2. Guest Speaker – APC Vs. LMP as a Metric for Transmission Value (tentative)
 3. Survey Results
 4. Example Using a Method Based on Survey Preferences
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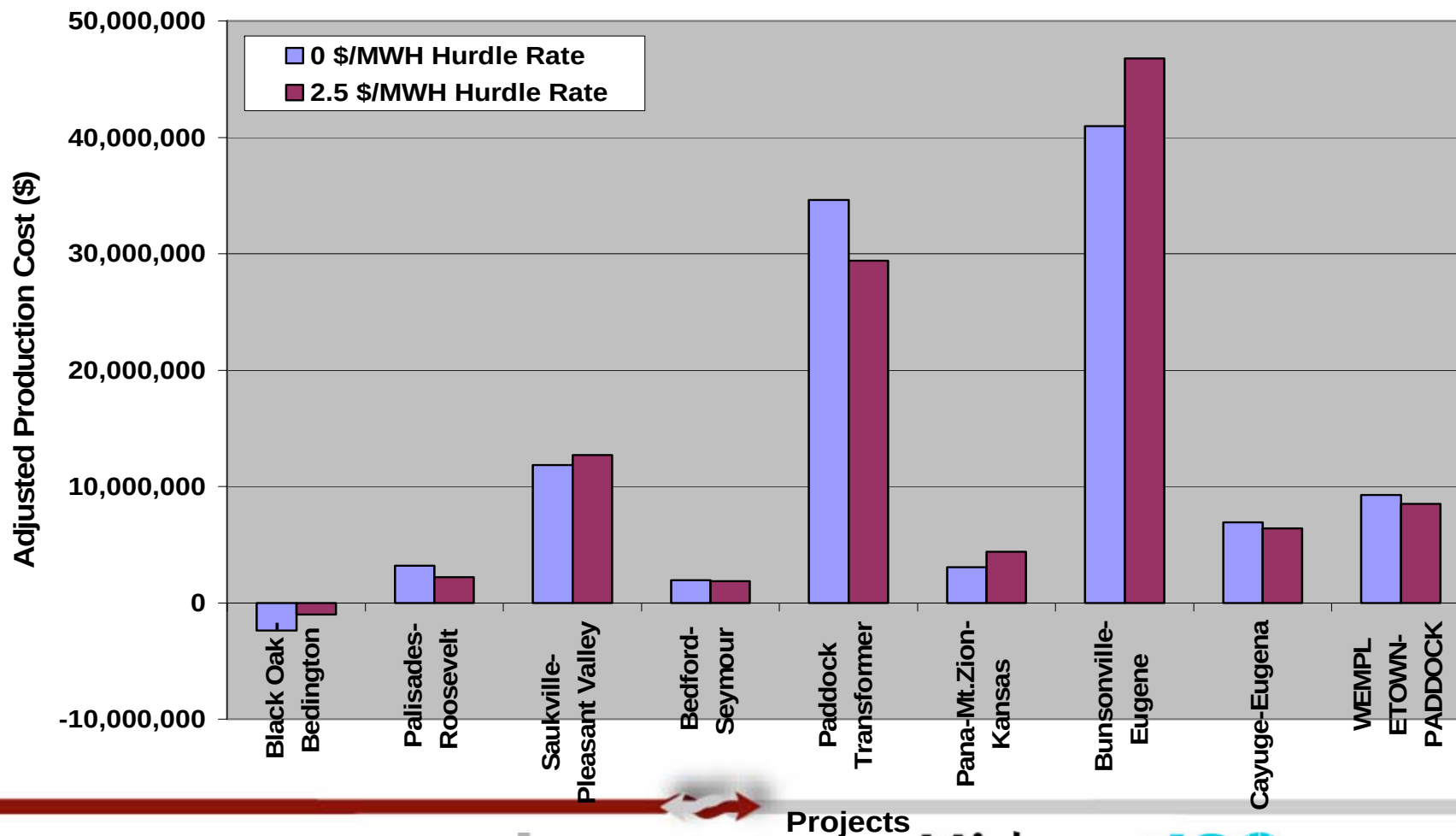
Effect of Hurdle Rate on Benefit Measures

Summary of tests and Conclusions:

- Looked at 9 examples using both a \$0 hurdle between PJM and MISO, and a \$2.50 hurdle
- Results indicate effect of hurdle on overall project benefit and benefit to each RTO
- See comparison charts

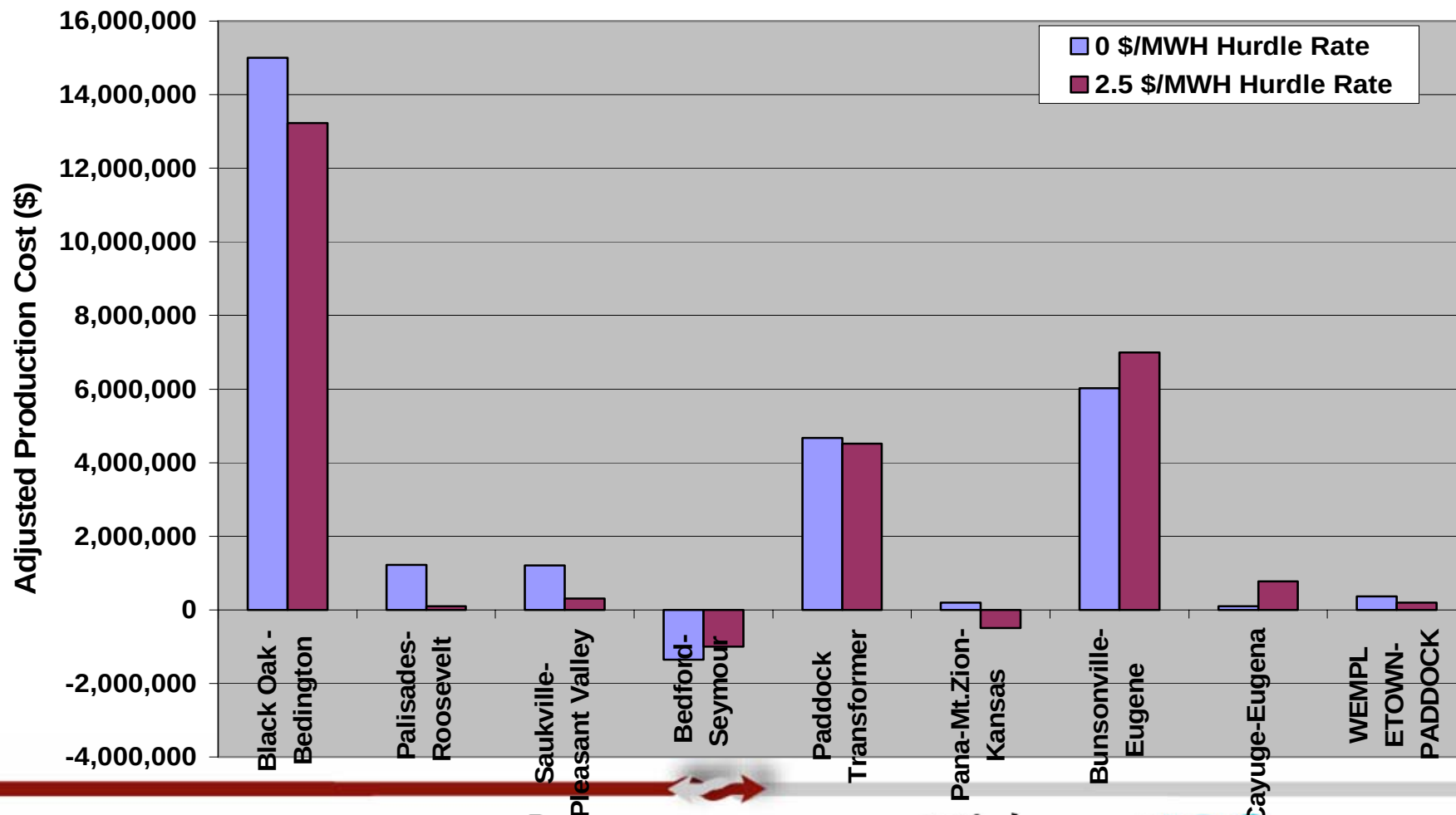
Effect of Hurdle Rate on Benefit Measures Comparison Charts

MISO Adjusted Production Cost Comparison with Different Hurdle Rates



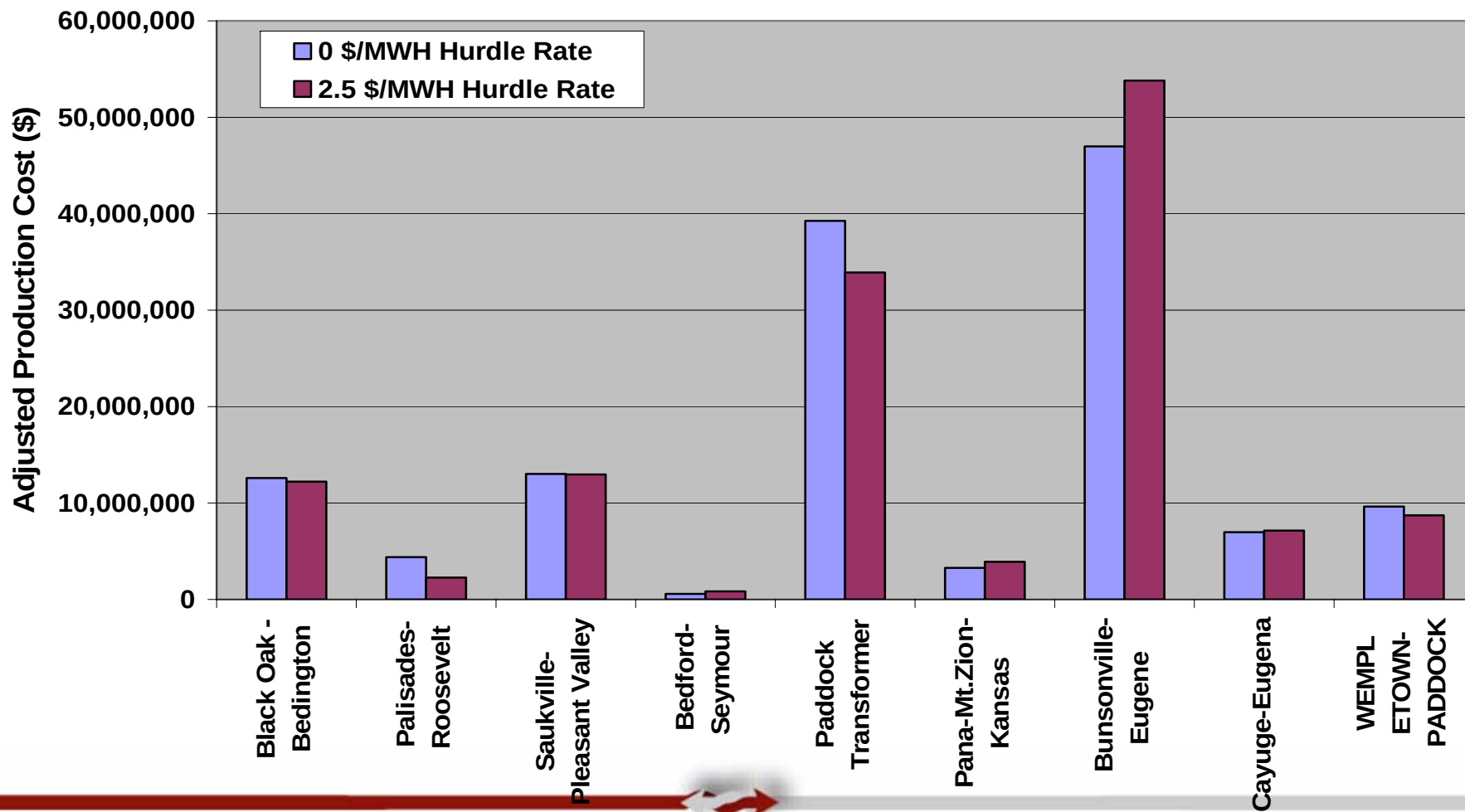
Effect of Hurdle Rate on Benefit Measures Comparison Charts

PJM Adjusted Production Cost Comparison with Different Hurdle Rates



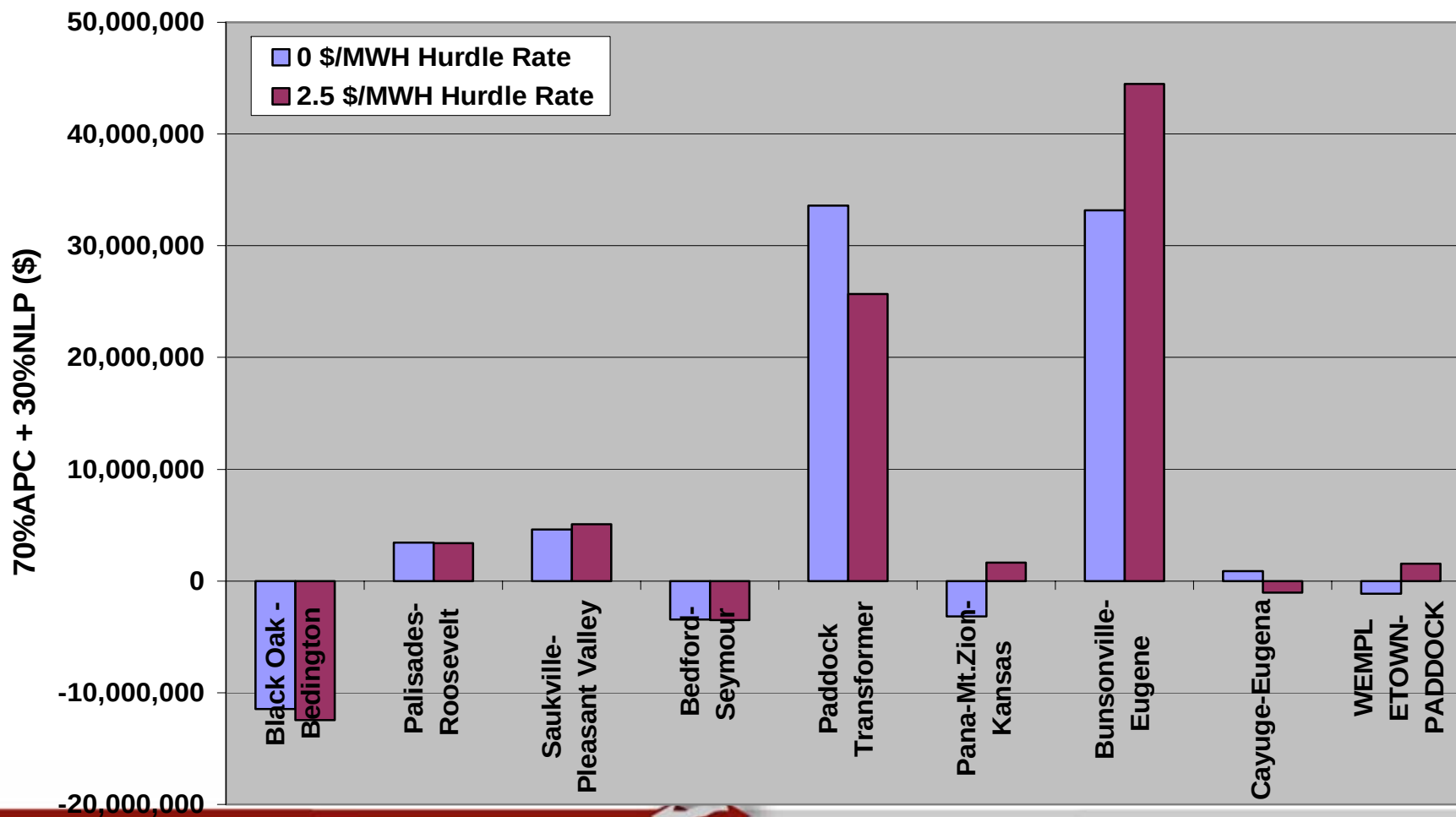
Effect of Hurdle Rate on Benefit Measures Comparison Charts

System Adjusted Production Cost Comparison with Different Hurdle Rates



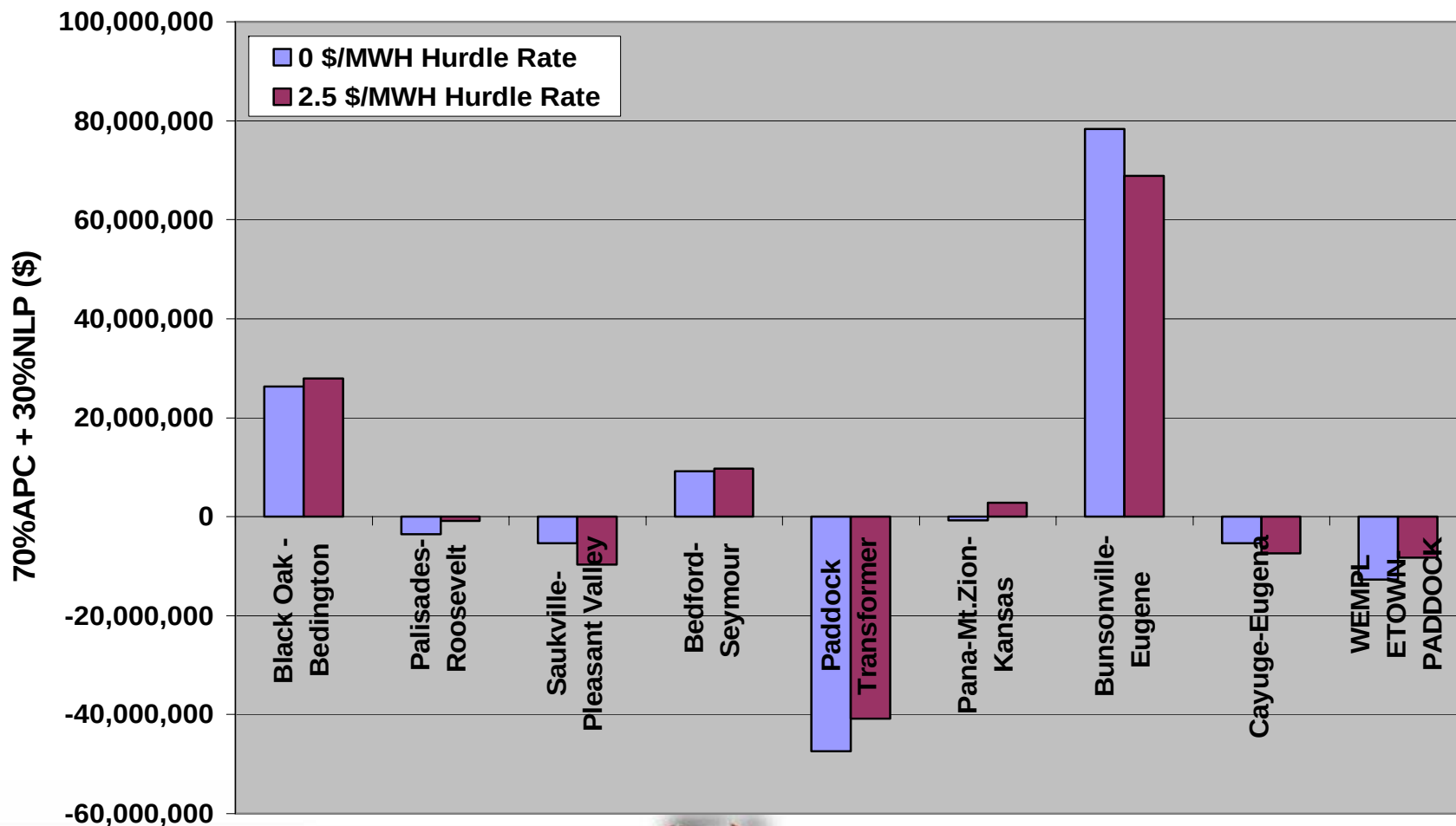
Effect of Hurdle Rate on Benefit Measures Comparison Charts

MISO 70%APC+30%NLP Benefit Comparison with Different Hurdle Rates



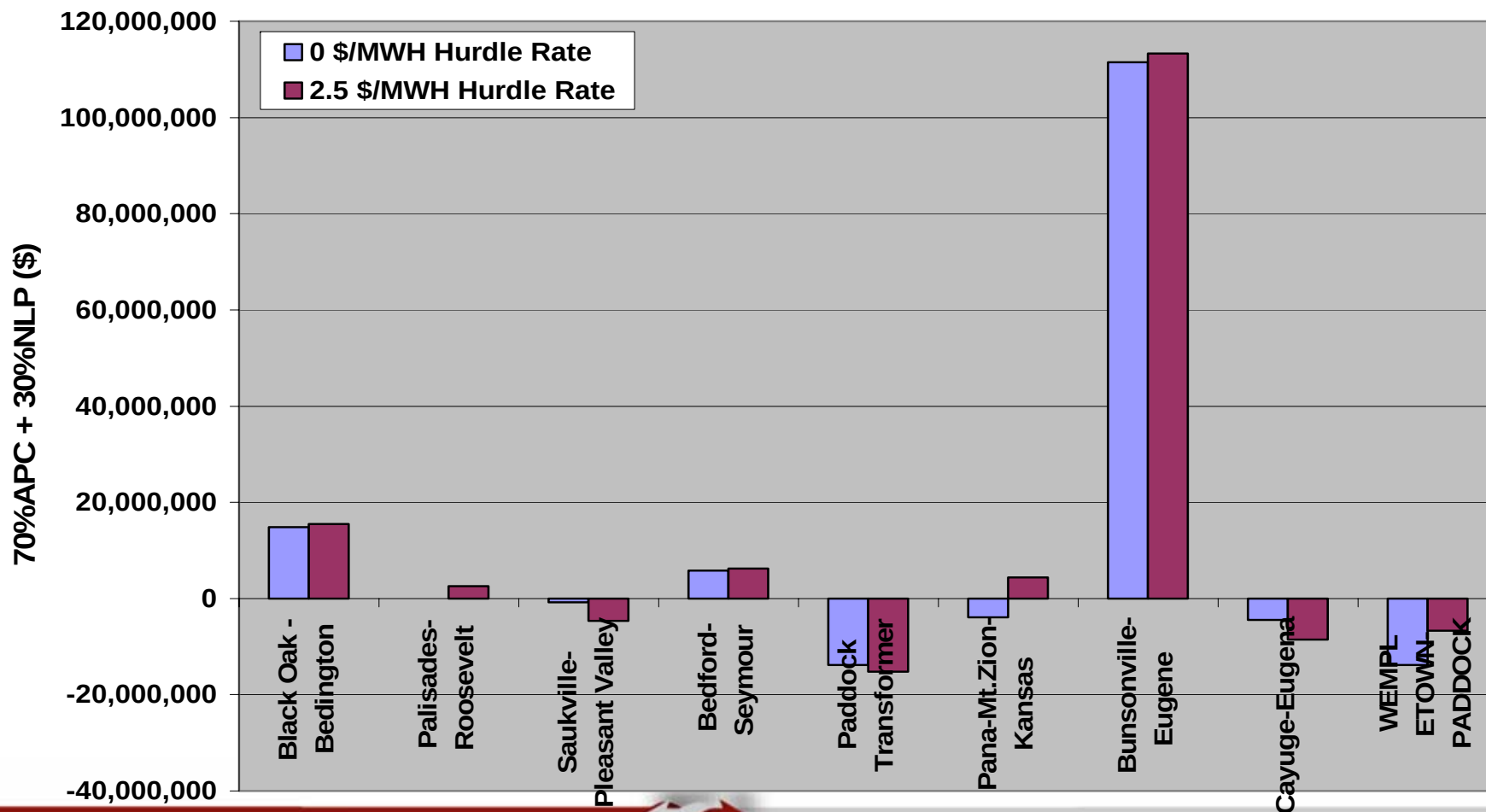
Effect of Hurdle Rate on Benefit Measures Comparison Charts

PJM 70%APC+30%NLP Benefit Comparison with Different Hurdle Rates



Effect of Hurdle Rate on Benefit Measures Comparison Charts

System 70%APC+30%NLP Benefit Comparison with Different Hurdle Rates



Effect of Hurdle Rate on Benefit Measures

Details



Black Oak - Bedington

	MISO	PJM	Total System
Generation MW	157,728	-157,737	-9
Gross Generation Revenue (GGR)	\$40,312,798	-\$62,651,051	-\$22,338,253
Gen Production Cost	\$10,060,070	-\$25,088,910	-\$15,028,840
Net Gen Revenue (NGR)	\$30,252,728	-\$37,562,141	-\$7,309,413
Load MW	0	0	0
Gross Load Payment (GLP)	\$35,682,057	-\$147,555,128	-\$111,873,070
FTR Credits	\$3,038,997	-\$94,989,142	-\$91,950,145
Net Load Payment (NLP)	\$32,643,061	-\$52,565,986	-\$19,922,925
Net Cost (NLP - NGR)	\$2,390,333	-\$15,003,845	-\$12,613,512

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	\$2,390,333	-\$15,003,845	-\$12,613,512	
70%(Gen Prod Cost) + 30%(NLP)	\$16,834,967	-\$33,332,033	-\$16,497,065	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	\$12,377,850	-\$54,769,230	-\$42,391,379	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$11,466,152	-\$26,272,487	-\$14,806,336	MISO Method (w/ NLP)

Delta Total System Congestion -89,534,817

	MISO	PJM	Total System
Generation MW	79,850	-79,930	-80
Gross Generation Revenue (GGR)	\$43,845,139	-\$68,512,415	-\$24,667,276
Gen Production Cost	\$5,635,465	-\$19,533,053	-\$13,897,587
Net Gen Revenue (NGR)	\$38,209,674	-\$48,979,363	-\$10,769,689
Load MW	0	0	0
Gross Load Payment (GLP)	\$41,001,868	-\$165,412,192	-\$124,410,324
FTR Credits	\$1,800,091	-\$103,202,507	-\$101,402,416
Net Load Payment (NLP)	\$39,201,777	-\$62,209,686	-\$23,007,908
Net Cost (NLP - NGR)	\$992,104	-\$13,230,323	-\$12,238,219

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	\$992,104	-\$13,230,323	-\$12,238,219	
70%(Gen Prod Cost) + 30%(NLP)	\$15,705,359	-\$32,336,042	-\$16,630,683	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	\$12,995,033	-\$58,884,884	-\$45,889,851	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$12,455,006	-\$27,924,132	-\$15,469,126	MISO Method (w/ NLP)

Delta Total System Congestion -99,743,048

Palisades-Roosevelt



	MISO	PJM	Total System
Generation MW	-148,232	148,282	49
Gross Generation Revenue (GGR)	-\$6,797,368	\$19,452,856	\$12,655,488
Gen Production Cost	-\$5,904,435	\$3,669,824	-\$2,234,610
Net Gen Revenue (NGR)	-\$892,933	\$15,783,032	\$14,890,098
Load MW	0	0	0
Gross Load Payment (GLP)	-\$8,928,930	\$17,192,600	\$8,263,670
FTR Credits	-\$4,853,541	\$2,631,945	-\$2,221,596
Net Load Payment (NLP)	-\$4,075,389	\$14,560,655	\$10,485,266
Net Cost (NLP - NGR)	-\$3,182,455	-\$1,222,377	-\$4,404,832

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$3,182,455	-\$1,222,377	-\$4,404,832	
70%(Gen Prod Cost) + 30%(NLP)	-\$5,355,721	\$6,937,074	\$1,581,353	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$4,906,398	\$4,302,116	-\$604,281	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$3,450,335	\$3,512,533	\$62,197	MISO Method (w/ NLP)

Delta Total System Congestion -4,391,818

	MISO	PJM	Total System
Generation MW	-120,597	120,580	-17
Gross Generation Revenue (GGR)	-\$9,031,735	\$6,766,227	-\$2,265,508
Gen Production Cost	-\$5,033,619	\$3,523,526	-\$1,510,094
Net Gen Revenue (NGR)	-\$3,998,116	\$3,242,702	-\$755,414
Load MW	0	0	0
Gross Load Payment (GLP)	-\$11,294,683	\$3,379,372	-\$7,915,311
FTR Credits	-\$5,101,414	\$226,835	-\$4,874,579
Net Load Payment (NLP)	-\$6,193,269	\$3,152,537	-\$3,040,732
Net Cost (NLP - NGR)	-\$2,195,153	-\$90,164	-\$2,285,318

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$2,195,153	-\$90,164	-\$2,285,318	
70%(Gen Prod Cost) + 30%(NLP)	-\$5,381,514	\$3,412,229	-\$1,969,285	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$4,925,012	\$950,697	-\$3,974,316	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$3,394,588	\$882,646	-\$2,511,942	MISO Method (w/ NLP)

Delta Total System Congestion -5,649,803

Saukville-Pleasant Valley



	MISO	PJM	Total System
Generation MW	23,449	-23,207	243
Gross Generation Revenue (GGR)	\$13,286,628	\$20,811,440	\$34,098,068
Gen Production Cost	-\$10,774,509	-\$1,050,821	-\$11,825,330
Net Gen Revenue (NGR)	\$24,061,137	\$21,862,261	\$45,923,398
Load MW	0	0	0
Gross Load Payment (GLP)	-\$22,460,643	\$26,525,040	\$4,064,397
FTR Credits	-\$34,695,255	\$5,863,599	-\$28,831,656
Net Load Payment (NLP)	\$12,234,612	\$20,661,441	\$32,896,053
Net Cost (NLP - NGR)	-\$11,826,525	-\$1,200,819	-\$13,027,344

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$11,826,525	-\$1,200,819	-\$13,027,344	
70%(Gen Prod Cost) + 30%(NLP)	-\$3,871,773	\$5,462,858	\$1,591,085	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$15,016,760	\$7,116,939	-\$7,899,822	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$4,608,184	\$5,357,859	\$749,675	MISO Method (w/ NLP)

Delta Total System Congestion -30,033,671

	MISO	PJM	Total System
Generation MW	-12,153	11,976	-177
Gross Generation Revenue (GGR)	\$12,126,438	\$33,979,496	\$46,105,934
Gen Production Cost	-\$13,248,632	\$597,543	-\$12,651,089
Net Gen Revenue (NGR)	\$25,375,070	\$33,381,954	\$58,757,023
Load MW	0	0	0
Gross Load Payment (GLP)	-\$21,861,763	\$37,642,569	\$15,780,806
FTR Credits	-\$34,557,789	\$4,567,541	-\$29,990,248
Net Load Payment (NLP)	\$12,696,026	\$33,075,028	\$45,771,054
Net Cost (NLP - NGR)	-\$12,679,044	-\$306,926	-\$12,985,970

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$12,679,044	-\$306,926	-\$12,985,970	
70%(Gen Prod Cost) + 30%(NLP)	-\$5,465,234	\$10,340,788	\$4,875,554	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$15,433,860	\$11,077,923	-\$4,355,937	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$5,066,523	\$9,707,660	\$4,641,137	MISO Method (w/ NLP)

Delta Total System Congestion -30,325,128

Bedford-Seymour

	MISO	PJM	Total System
Generation MW	51,512	-51,368	144
Gross Generation Revenue (GGR)	\$21,604,348	-\$40,634,342	-\$19,029,994
Gen Production Cost	\$3,548,581	-\$5,359,645	-\$1,811,064
Net Gen Revenue (NGR)	\$18,055,767	-\$35,274,696	-\$17,218,930
Load MW	0	0	0
Gross Load Payment (GLP)	-\$20,538,262	-\$34,254,748	-\$54,793,010
FTR Credits	-\$36,627,216	-\$340,542	-\$36,967,758
Net Load Payment (NLP)	\$16,088,954	-\$33,914,205	-\$17,825,251
Net Cost (NLP - NGR)	-\$1,966,813	\$1,360,491	-\$606,322

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$1,966,813	\$1,360,491	-\$606,322	
70%(Gen Prod Cost) + 30%(NLP)	\$7,310,693	-\$13,926,013	-\$6,615,320	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$7,538,247	-\$9,324,081	-\$16,862,328	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$3,449,917	-\$9,221,918	-\$5,772,001	MISO Method (w/ NLP)

Delta Total System Congestion -35,763,016

	MISO	PJM	Total System
Generation MW	54,306	-54,310	-4
Gross Generation Revenue (GGR)	\$20,950,902	-\$40,598,679	-\$19,647,777
Gen Production Cost	\$3,083,289	-\$4,902,514	-\$1,819,226
Net Gen Revenue (NGR)	\$17,867,613	-\$35,696,165	-\$17,828,552
Load MW	0	0	0
Gross Load Payment (GLP)	-\$25,676,316	-\$31,776,938	-\$57,453,255
FTR Credits	-\$41,683,452	\$2,917,422	-\$38,766,030
Net Load Payment (NLP)	\$16,007,136	-\$34,694,360	-\$18,687,224
Net Cost (NLP - NGR)	-\$1,860,478	\$1,001,805	-\$858,673

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$1,860,478	\$1,001,805	-\$858,673	
70%(Gen Prod Cost) + 30%(NLP)	\$6,960,443	-\$13,840,068	-\$6,879,625	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$9,005,229	-\$8,831,818	-\$17,837,047	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$3,499,806	-\$9,707,044	-\$6,207,238	MISO Method (w/ NLP)

Delta Total System Congestion -37,805,477

Paddock Transformer

	MISO	PJM	Total System
Generation MW	-685,322	685,219	-103
Gross Generation Revenue (GGR)	-\$54,971,344	\$205,385,341	\$150,413,997
Gen Production Cost	-\$58,322,824	\$31,783,332	-\$26,539,492
Net Gen Revenue (NGR)	\$3,351,480	\$173,602,009	\$176,953,489
Load MW	0	0	0
Gross Load Payment (GLP)	-\$69,381,481	\$137,332,017	\$67,950,536
FTR Credits	-\$38,121,223	-\$31,605,877	-\$69,727,100
Net Load Payment (NLP)	-\$31,260,258	\$168,937,894	\$137,677,636
Net Cost (NLP - NGR)	-\$34,611,738	-\$4,664,115	-\$39,275,853

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$34,611,738	-\$4,664,115	-\$39,275,853	
70%(Gen Prod Cost) + 30%(NLP)	-\$50,204,054	\$72,929,700	\$22,725,647	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$45,042,661	\$37,934,725	-\$7,107,936	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$33,606,294	\$47,416,488	\$13,810,194	MISO Method (w/ NLP)

Delta Total System Congestion -82,463,461

	MISO	PJM	Total System
Generation MW	-548,564	548,128	-436
Gross Generation Revenue (GGR)	-\$36,651,707	\$174,221,519	\$137,569,812
Gen Production Cost	-\$49,073,699	\$22,930,196	-\$26,143,503
Net Gen Revenue (NGR)	\$12,421,992	\$151,291,323	\$163,713,314
Load MW	0	0	0
Gross Load Payment (GLP)	-\$51,355,984	\$118,202,671	\$66,846,687
FTR Credits	-\$34,378,216	-\$28,567,983	-\$62,946,199
Net Load Payment (NLP)	-\$16,977,768	\$146,770,654	\$129,792,886
Net Cost (NLP - NGR)	-\$29,399,760	-\$4,520,669	-\$33,920,428

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$29,399,760	-\$4,520,669	-\$33,920,428	
70%(Gen Prod Cost) + 30%(NLP)	-\$39,444,920	\$60,082,333	\$20,637,414	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$35,986,627	\$32,296,333	-\$3,690,294	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$25,673,162	\$40,866,728	\$15,193,566	MISO Method (w/ NLP)

Delta Total System Congestion -70,723,124

Pana-Mt.Zion-Kansas

	MISO	PJM	Total System
Generation MW	\$85,319	-\$85,048	\$271
Gross Generation Revenue (GGR)	\$21,064,972	-\$1,097,106	\$19,967,866
Gen Production Cost	\$285,792	-\$4,319,389	-\$4,033,597
Net Gen Revenue (NGR)	\$20,779,180	\$3,222,283	\$24,001,463
Load MW	0	0	0
Gross Load Payment (GLP)	\$5,772,255	\$2,157,682	\$7,929,937
FTR Credits	-\$11,925,739	-\$865,554	-\$12,791,293
Net Load Payment (NLP)	\$17,697,994	\$3,023,236	\$20,721,230
Net Cost (NLP - NGR)	-\$3,081,186	-\$199,047	-\$3,280,233

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$3,081,186	-\$199,047	-\$3,280,233
70%(Gen Prod Cost) + 30%(NLP)	\$5,509,453	-\$2,116,602	\$3,392,851
70%(Adjusted Prod Cost) + 30%(GLP)	-\$425,154	\$507,972	\$82,818
70%(Adjusted Prod Cost) + 30%(NLP)	\$3,152,568	\$767,638	\$3,920,206

PJM Method

MISO Method

MISO Method (w/ NLP)

Delta Total System Congestion -12,037,929

	MISO	PJM	Total System
Generation MW	52,312	-52,534	-222
Gross Generation Revenue (GGR)	\$7,489,847	-\$13,539,340	-\$6,049,493
Gen Production Cost	-\$1,711,250	-\$2,593,719	-\$4,304,969
Net Gen Revenue (NGR)	\$9,201,098	-\$10,945,621	-\$1,744,524
Load MW	0	0	0
Gross Load Payment (GLP)	-\$5,660,916	-\$13,627,289	-\$19,288,205
FTR Credits	-\$10,452,922	-\$3,182,764	-\$13,635,686
Net Load Payment (NLP)	\$4,792,007	-\$10,444,525	-\$5,652,519
Net Cost (NLP - NGR)	-\$4,409,091	\$501,096	-\$3,907,995

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$4,409,091	\$501,096	-\$3,907,995
70%(Gen Prod Cost) + 30%(NLP)	\$239,727	-\$4,948,961	-\$4,709,234
70%(Adjusted Prod Cost) + 30%(GLP)	-\$4,784,638	-\$3,737,420	-\$8,522,058
70%(Adjusted Prod Cost) + 30%(NLP)	-\$1,648,762	-\$2,782,590	-\$4,431,352

PJM Method

MISO Method

MISO Method (w/ NLP)

Delta Total System Congestion -13,238,712

Bunsonville-Eugene

	MISO	PJM	Total System
Generation MW	\$1,652,883	-\$1,651,316	\$1,568
Gross Generation Revenue (GGR)	\$41,060,884	-\$325,592,253	-\$284,531,369
Gen Production Cost	\$15,133,381	-\$84,572,848	-\$69,439,467
Net Gen Revenue (NGR)	\$25,927,503	-\$241,019,405	-\$215,091,902
Load MW	0	0	0
Gross Load Payment (GLP)	\$45,485,627	-\$227,037,072	-\$181,551,444
FTR Credits	\$60,524,245	\$20,003,677	\$80,527,922
Net Load Payment (NLP)	-\$15,038,617	-\$247,040,749	-\$262,079,366
Net Cost (NLP - NGR)	-\$40,966,120	-\$6,021,344	-\$46,987,464

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$40,966,120	-\$6,021,344	-\$46,987,464
70%(Gen Prod Cost) + 30%(NLP)	\$6,081,781	-\$133,313,218	-\$127,231,437
70%(Adjusted Prod Cost) + 30%(GLP)	-\$15,030,596	-\$72,326,062	-\$87,356,658
70%(Adjusted Prod Cost) + 30%(NLP)	-\$33,187,869	-\$78,327,165	-\$111,515,034

PJM Method

MISO Method

MISO Method (w/ NLP)

Delta Total System Congestion

102,979,925

	MISO	PJM	Total System
Generation MW	1,648,003	-1,646,455	1,548
Gross Generation Revenue (GGR)	\$17,285,292	-\$285,921,206	-\$268,635,915
Gen Production Cost	\$9,561,130	-\$79,686,107	-\$70,124,978
Net Gen Revenue (NGR)	\$7,724,162	-\$206,235,099	-\$198,510,937
Load MW	0	0	0
Gross Load Payment (GLP)	\$26,575,795	-\$190,983,501	-\$164,407,706
FTR Credits	\$65,649,334	\$22,250,390	\$87,899,723
Net Load Payment (NLP)	-\$39,073,538	-\$213,233,891	-\$252,307,430
Net Cost (NLP - NGR)	-\$46,797,700	-\$6,998,792	-\$53,796,492

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$46,797,700	-\$6,998,792	-\$53,796,492
70%(Gen Prod Cost) + 30%(NLP)	-\$5,029,271	-\$119,750,442	-\$124,779,713
70%(Adjusted Prod Cost) + 30%(GLP)	-\$24,785,652	-\$62,194,205	-\$86,979,857
70%(Adjusted Prod Cost) + 30%(NLP)	-\$44,480,452	-\$68,869,322	-\$113,349,774

PJM Method

MISO Method

MISO Method (w/ NLP)

Delta Total System Congestion

104,228,209

Cayuge-Eugena



	MISO	PJM	Total System
Generation MW	-\$100,871	\$100,882	\$11
Gross Generation Revenue (GGR)	\$9,390,526	\$22,675,708	\$32,066,235
Gen Production Cost	-\$10,616,346	\$4,366,812	-\$6,249,534
Net Gen Revenue (NGR)	\$20,006,873	\$18,308,896	\$38,315,769
Load MW	0	0	0
Gross Load Payment (GLP)	\$10,058,587	\$11,651,163	\$21,709,750
FTR Credits	-\$3,047,743	-\$6,555,483	-\$9,603,226
Net Load Payment (NLP)	\$13,106,330	\$18,206,646	\$31,312,976
Net Cost (NLP - NGR)	-\$6,900,543	-\$102,250	-\$7,002,793

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$6,900,543	-\$102,250	-\$7,002,793	
70%(Gen Prod Cost) + 30%(NLP)	-\$3,499,543	\$8,518,762	\$5,019,219	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$1,812,804	\$3,423,774	\$1,610,970	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$898,481	\$5,390,419	\$4,491,938	MISO Method (w/ NLP)

Delta Total System Congestion -10,356,485

	MISO	PJM	Total System
Generation MW	-43,864	43,921	57
Gross Generation Revenue (GGR)	\$17,017,775	\$28,315,810	\$45,333,585
Gen Production Cost	-\$7,742,540	\$913,225	-\$6,829,316
Net Gen Revenue (NGR)	\$24,760,316	\$27,402,585	\$52,162,901
Load MW	0	0	0
Gross Load Payment (GLP)	\$15,904,174	\$20,414,286	\$36,318,460
FTR Credits	-\$2,464,368	-\$6,216,474	-\$8,680,842
Net Load Payment (NLP)	\$18,368,542	\$26,630,759	\$44,999,302
Net Cost (NLP - NGR)	-\$6,391,773	-\$771,826	-\$7,163,599

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$6,391,773	-\$771,826	-\$7,163,599	
70%(Gen Prod Cost) + 30%(NLP)	\$90,784	\$8,628,485	\$8,719,270	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	\$297,011	\$5,584,008	\$5,881,019	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$1,036,322	\$7,448,950	\$8,485,271	MISO Method (w/ NLP)

Delta Total System Congestion -9,015,125

WEMPLTOWN-PADDOCK

	MISO	PJM	Total System
Generation MW	-\$127,931	\$127,647	-\$284
Gross Generation Revenue (GGR)	\$19,416,412	\$50,556,357	\$69,972,769
Gen Production Cost	-\$15,300,072	\$7,066,495	-\$8,233,578
Net Gen Revenue (NGR)	\$34,716,484	\$43,489,862	\$78,206,346
Load MW	0	0	0
Gross Load Payment (GLP)	\$19,353,458	\$31,423,694	\$50,777,151
FTR Credits	-\$6,090,388	-\$11,702,490	-\$17,792,878
Net Load Payment (NLP)	\$25,443,846	\$43,126,184	\$68,570,030
Net Cost (NLP - NGR)	-\$9,272,638	-\$363,678	-\$9,636,317

0\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$9,272,638	-\$363,678	-\$9,636,317	
70%(Gen Prod Cost) + 30%(NLP)	-\$3,076,897	\$17,884,402	\$14,807,504	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$684,810	\$9,172,533	\$8,487,724	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	\$1,142,307	\$12,683,280	\$13,825,587	MISO Method (w/ NLP)

Delta Total System Congestion -19,195,617

	MISO	PJM	Total System
Generation MW	-99,650	99,497	-153
Gross Generation Revenue (GGR)	\$10,174,334	\$33,665,743	\$43,840,077
Gen Production Cost	-\$13,020,953	\$5,293,139	-\$7,727,813
Net Gen Revenue (NGR)	\$23,195,287	\$28,372,604	\$51,567,891
Load MW	0	0	0
Gross Load Payment (GLP)	\$7,368,333	\$18,200,788	\$25,569,121
FTR Credits	-\$7,308,265	-\$9,972,263	-\$17,280,528
Net Load Payment (NLP)	\$14,676,598	\$28,173,051	\$42,849,649
Net Cost (NLP - NGR)	-\$8,518,689	-\$199,553	-\$8,718,242

2.5\$/MWH Hurdle

Blended Metrics

Adjusted Production Cost	-\$8,518,689	-\$199,553	-\$8,718,242	
70%(Gen Prod Cost) + 30%(NLP)	-\$4,711,687	\$12,157,113	\$7,445,425	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$3,752,583	\$5,320,549	\$1,567,967	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$1,560,103	\$8,312,228	\$6,752,125	MISO Method (w/ NLP)

Delta Total System Congestion -18,270,957

APC Vs. LMP



Survey Results

(see separate Word Doc)

Method Based on Survey Preferences

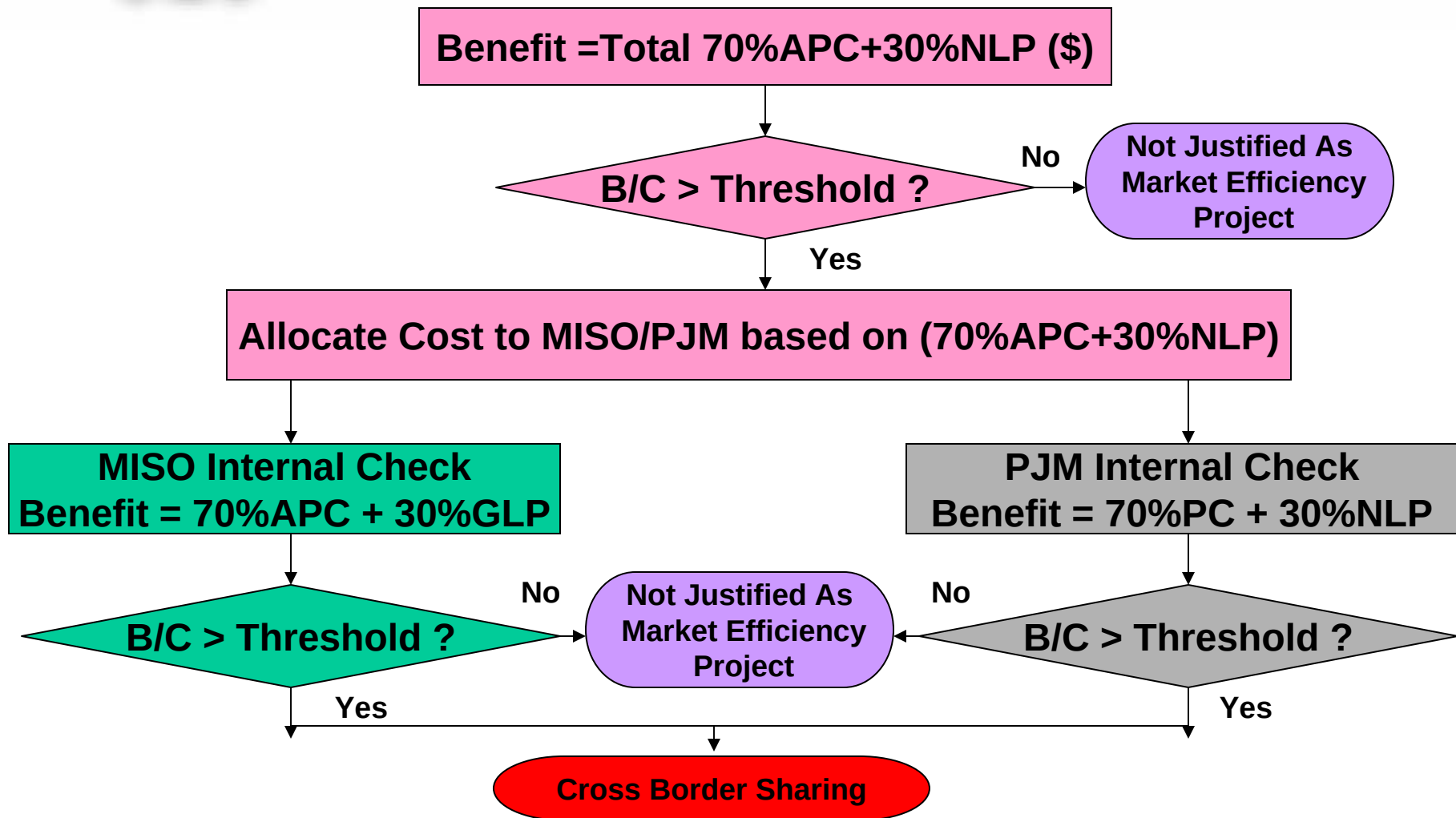
Preferences:

- Project Voltage Threshold: 345 kV
- Project Direct Cost Estimate Threshold: \$20 M
- Benefit metric: 70% APC + 30% NLP
 - 70% APC + 30% GLP (1015)
 - 70% (APC or PC) + 30% NLP (1248)
- NLP: FTR credit as RTO G-to-L congestion and as full credit to Load Payment
- B/C ratio: 1.25 (assuming NLP or APC Benefit Metric)
- Allocation Metric: Same as Benefit Metric, No Postage Stamp component
- Other Thresholds: Project B/C must pass each RTO internal metric for Economic Project

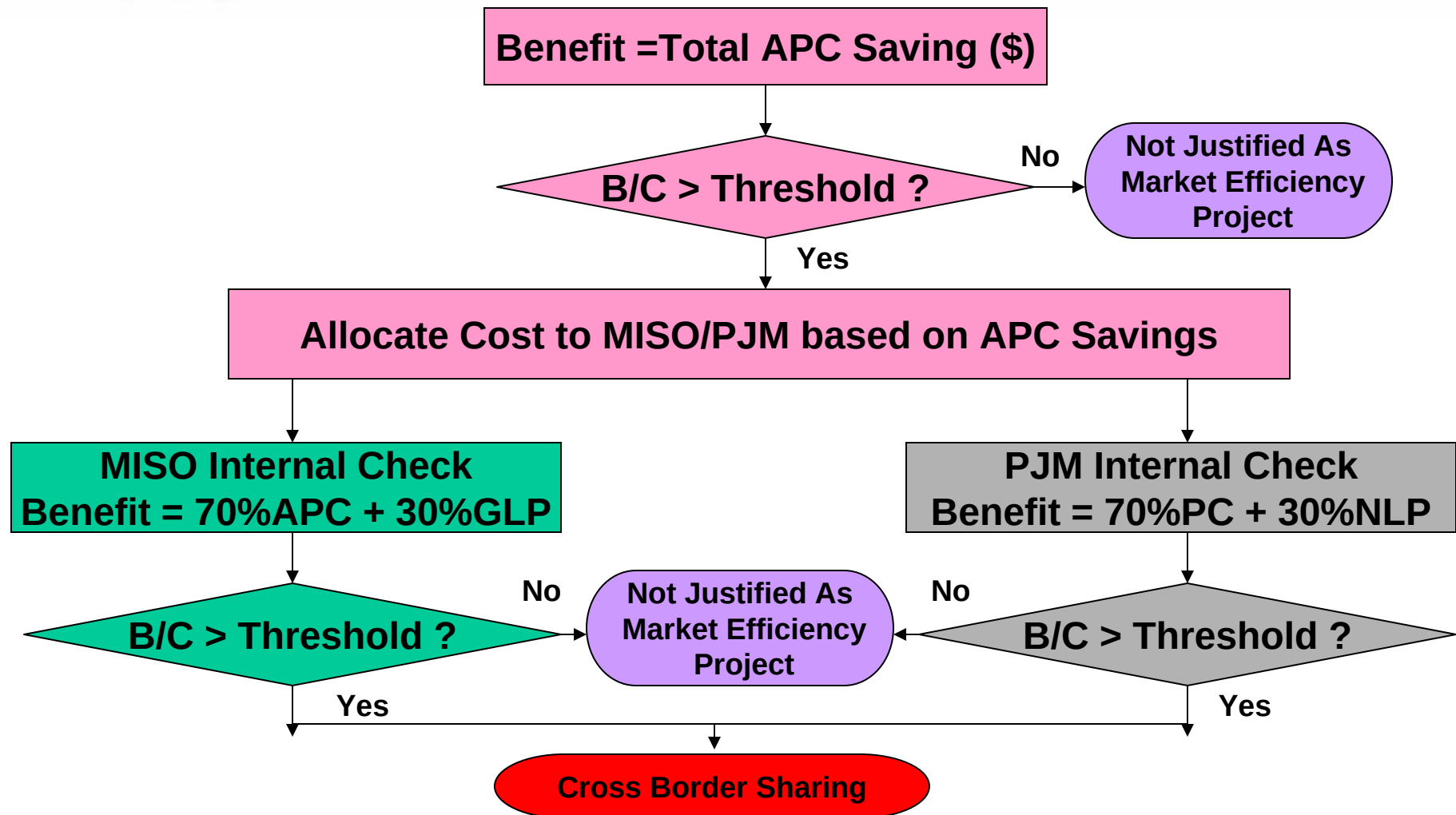
Leaving on the table for now because:

- RTOs (and economists) believe this may be a more appropriate measure of market efficiency benefit to loads
- Internal metrics (both are “blends”) are still the backstop for qualification as a cross border project
- Provides a stand-alone cross border metric, unaffected by possible future changes in internal methods

Proposal 1: Use 70%APC + 30%NLP



Proposal 2: Use Adjusted Production Cost



Examples Based on Survey Preferences



Example 1: Paddock Transformer

	MISO	PJM	Total System
Generation MW	-685,322	685,219	-103
Gross Generation Revenue (GGR)	-\$54,971,344	\$205,385,341	\$150,413,997
Gen Production Cost	-\$58,322,824	\$31,783,332	-\$26,539,492
Net Gen Revenue (NGR)	\$3,351,480	\$173,602,009	\$176,953,489
Load MW	0	0	0
Gross Load Payment (GLP)	-\$69,381,481	\$137,332,017	\$67,950,536
FTR Credits	-\$38,121,223	-\$31,605,877	-\$69,727,100
Net Load Payment (NLP)	-\$31,260,258	\$168,937,894	\$137,677,636
Net Cost (NLP - NGR)	-\$34,611,738	-\$4,664,115	-\$39,275,853

0\$/MWH Hurdle

Blended Metrics

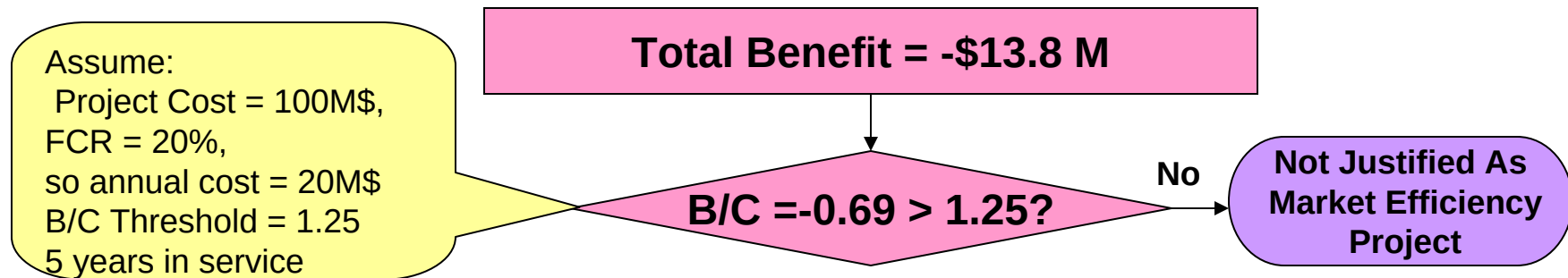
Adjusted Production Cost	-\$34,611,738	-\$4,664,115	-\$39,275,853	
70%(Gen Prod Cost) + 30%(NLP)	-\$50,204,054	\$72,929,700	\$22,725,647	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$45,042,661	\$37,934,725	-\$7,107,936	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$33,606,294	\$47,416,488	\$13,810,194	MISO Method (w/ NLP)

Delta Total System Congestion -82,463,461



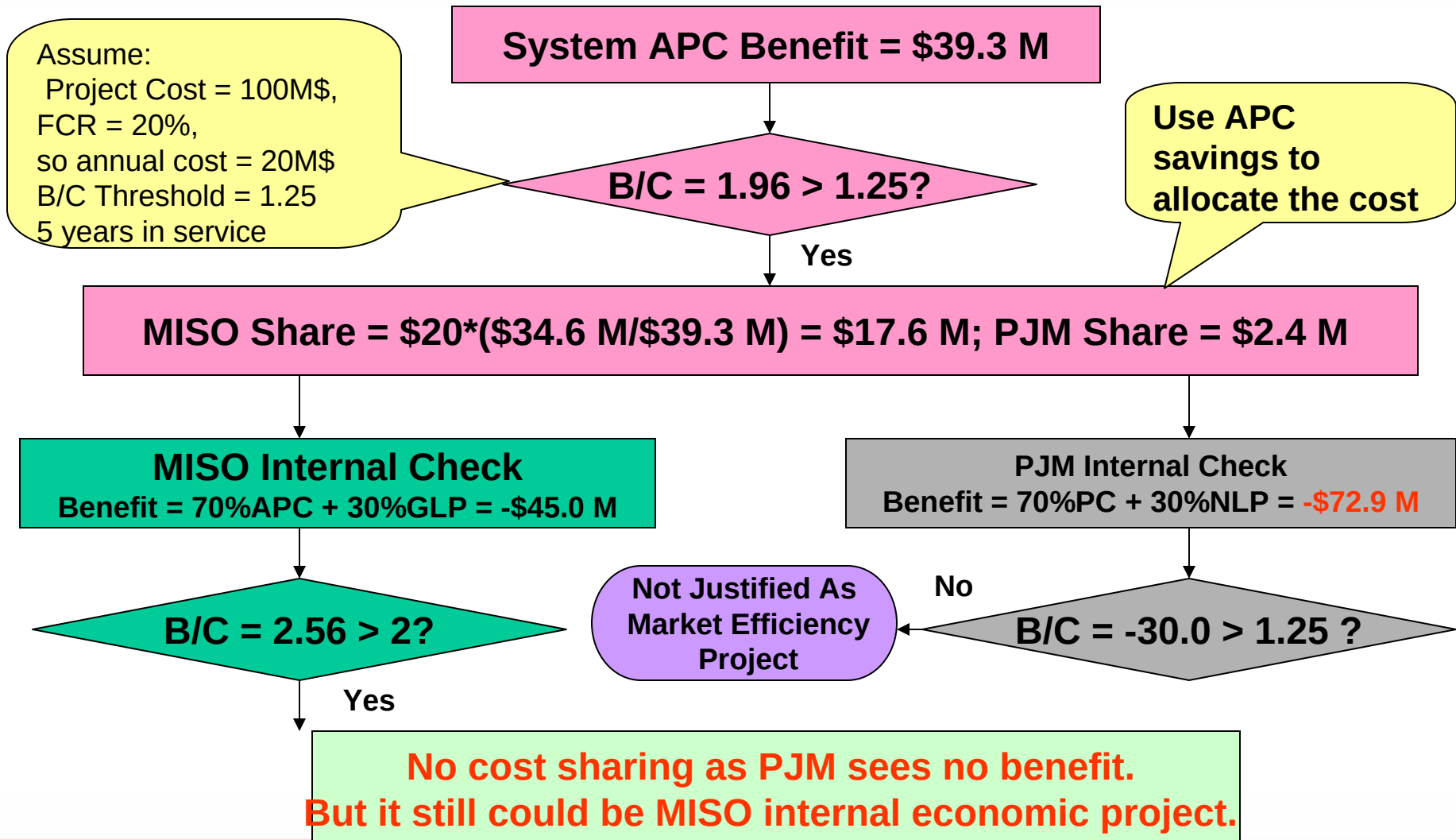
Proposal 1: Use 70%APC + 30%NLP

[Paddock Transformer]



Proposal 2: Use Adjusted Production Cost

[Paddock Transformer]



Example 2: Bunsonville-Eugene

	MISO	PJM	Total System
Generation MW	\$1,652,883	-\$1,651,316	\$1,568
Gross Generation Revenue (GGR)	\$41,060,884	-\$325,592,253	-\$284,531,369
Gen Production Cost	\$15,133,381	-\$84,572,848	-\$69,439,467
Net Gen Revenue (NGR)	\$25,927,503	-\$241,019,405	-\$215,091,902
Load MW	0	0	0
Gross Load Payment (GLP)	\$45,485,627	-\$227,037,072	-\$181,551,444
FTR Credits	\$60,524,245	\$20,003,677	\$80,527,922
Net Load Payment (NLP)	-\$15,038,617	-\$247,040,749	-\$262,079,366
Net Cost (NLP - NGR)	-\$40,966,120	-\$6,021,344	-\$46,987,464

0\$/MWH Hurdle

Blended Metrics

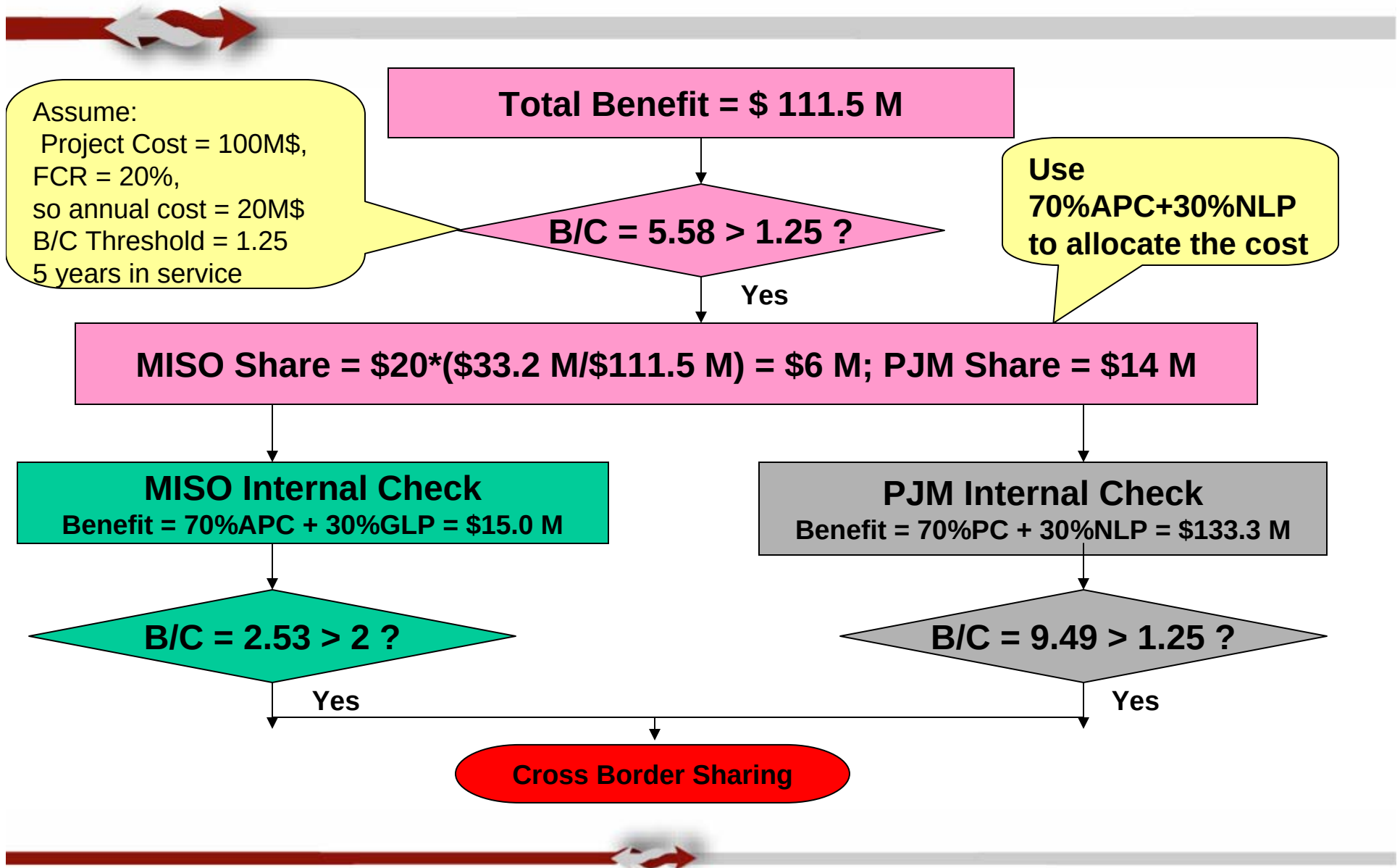
Adjusted Production Cost	-\$40,966,120	-\$6,021,344	-\$46,987,464	
70%(Gen Prod Cost) + 30%(NLP)	\$6,081,781	-\$133,313,218	-\$127,231,437	PJM Method
70%(Adjusted Prod Cost) + 30%(GLP)	-\$15,030,596	-\$72,326,062	-\$87,356,658	MISO Method
70%(Adjusted Prod Cost) + 30%(NLP)	-\$33,187,869	-\$78,327,165	-\$111,515,034	MISO Method (w/ NLP)

Delta Total System Congestion 102,979,925



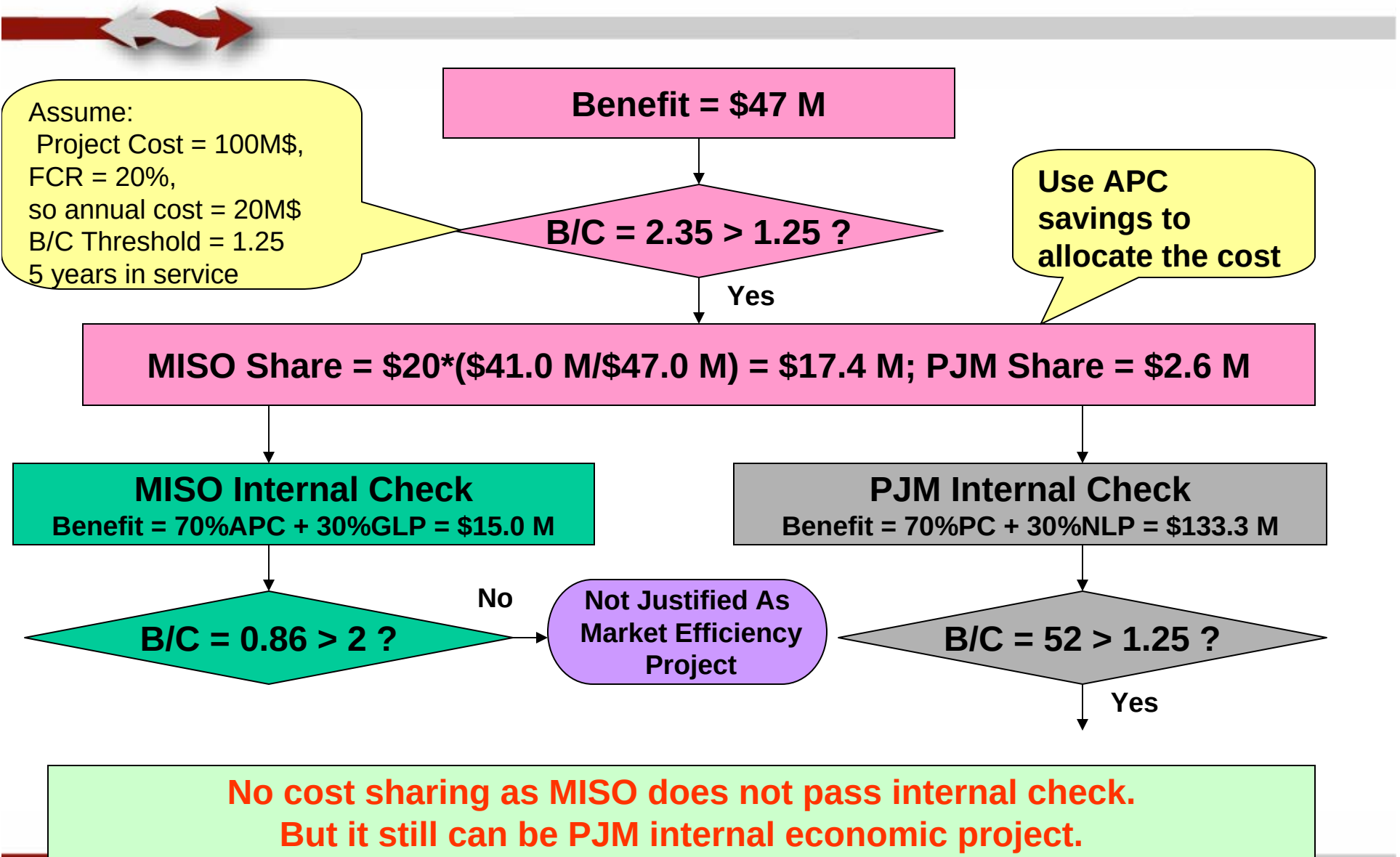
Proposal 1: Use 70%APC + 30%NLP

[Bunsonville-Eugene]



Proposal 2: Use Adjusted Production Cost

[Bunsonville-Eugene]



Stakeholder Discussion of Preferred Methodology?



FTR/ARR Value Estimate Methods – PJM/MISO

- Stakeholders voted 2.7:1 for using the RTO proposed method to implicitly calculate ARR credits rather than another method such as the internal PJM method using actual current day FTR/ARRs.
- Method of using actual ARRs is more difficult and not necessarily more accurate than proposal based on calculating implicit congestion
- However, no substantive differences appear to exist in each RTOs ARR allocation methods that would preclude applying the PJM ARR valuing method to MISO ARRs

Schedule / Next Steps

7/15/08 FERC Milestones

<u>Task Description</u>	<u>Date</u>
Develop an appropriate threshold test methodology	8/31/08
Review the results of the threshold test analysis	9/08
Achieve consensus support for specific cost sharing criteria	12/1/08
Circulate draft a Transmittal letter, appropriate JOA Tariff language and supporting documentation	1/15/09
Make FERC filing, including: (1) the issues that have generally been agreed to by the stakeholders; (2) the issues that remain outstanding; and (3) the likelihood of being able to reach consensus agreement on the disputed issues	1/29/09

NEXT STEPS

- November meeting
 - finalize on a construct
 - discuss some other process issues, such as
 - how to handle project built in one that benefits only the other versus same benefiting both - are both of these Xborder under the tariff or is the former just a negotiated build?
 - Number of and which years to study for benefits
 - Discount rate
 - Fixed charge rate
 - Others?
- December discuss tariff (JOA) language
- Early January meeting or call if needed to finalize tariff
- File end of January