



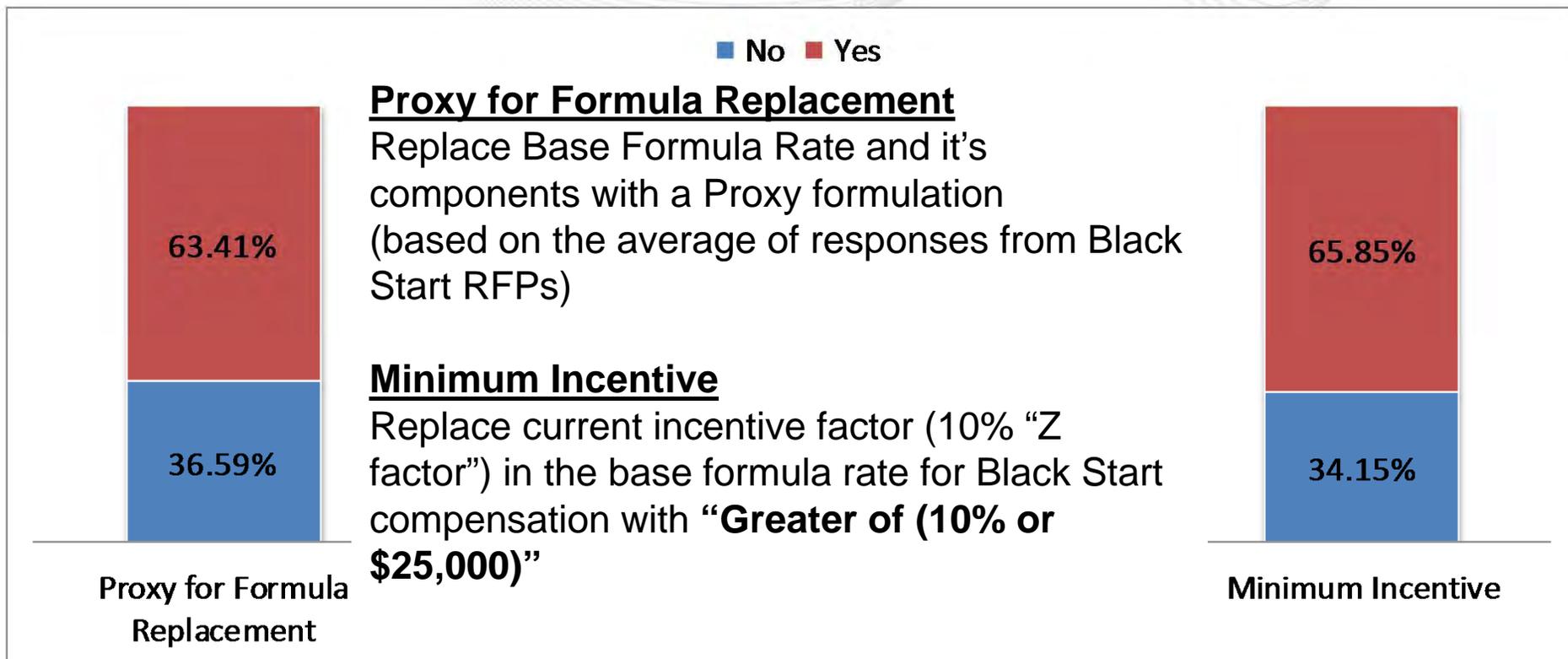
# System Restoration Strategy Task Force Update

MRC

February 27, 2014

*This Task Force will examine the current System Restoration Planning process to determine its viability and efficiency moving forward and recommend any changes to the System Restoration strategy and associated procurement, cost allocation, and compensation methods, inclusive of back stop options to the MRC for approval.*

- ✓ **Strategy changes developed and approved by FERC on 9/9/13**
  - **RTO-wide Black Start RFP responses being evaluated (Target April 2014)**
- **Task Force developing potential changes to compensation and back stop options**
  - **Compensation Proposals going to January MRC for 1<sup>st</sup> read**
  - **Back stop proposals still being developed**



***Conclusion: Minimum Incentive proposal is the main motion to be voted on. Proxy for Formula replacement is the alternative motion.***



## Main Proposal - Minimum Incentive Proposal

- Primary change: Replace 10% "Z factor" (incentive factor) in the base formula rate for Black Start compensation with "Greater of (10% or \$25,000)"
  - Would guarantee a minimum incentive of \$25,000 per unit for units on base formula rate
  - Capital Recovery Rate and NERC CIP Capital Recovery Rates would not change
- Other changes include:
  - Allow non-ICAP Black Start units to be compensated using the offered Black Start MW
  - Allow ALR units to recover NERC Compliance costs as documented to the IMM
  - Allow for fuel storage compensation for fuels other than oil
  - Provide for a 5 year PJM internal review of formula



## Alternate Proposal – Proxy for Formula Replacement

Primary change: Replace Base Formula Rate and it's components with a Proxy formulation

- Proxy developed based on the average of responses from Black Start RFPs
- Capital Recovery Rate and NERC CIP Capital Recovery Rates would not change

Black Start Resource Size	Initial Capital Payment to add Black Start (from RFP Responses)	Additional Black Start Resource Capital Payment (From RFP Responses)	Annual Black Start Capital Payment (using 0.125 CRF)	Additional Resource Annual Black Start Capital Payment	Annual Black Start O&M Payment (from RFP Responses)	Annual Black Start Fuel Storage Payment (from RFP Responses)	Unit Total Annual Black Start Payment (including Training)
MW <= 10*	\$275,798	\$105,871	\$34,475	\$13,234	\$3,351	\$6,280	\$47,855
10 > MW <= 60	\$1,930,588	\$741,097	\$241,323	\$92,637	\$23,456	\$43,957	\$312,486
60 > MW <= 90	\$5,069,227	\$1,258,927	\$633,653	\$157,366	\$37,572	\$64,152	\$739,127
90 > MW <=300 Small Starting requirement	\$6,861,848	\$1,953,800	\$857,731	\$244,225	\$182,896	\$87,700	\$1,132,077
90 > MW <=300 Medium Starting Requirement	\$16,918,852	\$1,953,800	\$2,114,856	\$244,225	\$182,896	\$87,700	\$2,389,202
90 > MW <=300 Large Starting Requirement	\$24,552,399	\$1,953,800	\$3,069,050	\$244,225	\$182,896	\$87,700	\$3,343,395
* No Data from RFP Responses. Assumed 5/35 of 10 > MW<= 60 MW Values							



## Annual Revenue Comparison for 20 MW CT

	Status Quo	Minimum Incentive Proposal	Proxy for Base Formula Replacement
Rate Type	Base Formula Rate	Base Formula Rate + Minimum Incentive	One Rate for All Units on Formula Rate
Capital	\$ 35,713	\$ 35,713	\$ 241,323
O&M	\$ 2,000	\$ 2,000	\$ 23,456
CIP O&M	Included in O&M	Included in O&M	Included in O&M
CIP Capital	NERC-CIP Rate	\$ NERC-CIP Rate	Included in Capital
Training	\$ 3,750	\$ 3,750	\$ 3,750
Fuel Storage	\$ 5,146	\$ 5,146	\$ 43,957
Incentive	10%	Greater of (10% or \$25,000)	N/A
Total	\$ 51,270	\$ 46,609 + \$25,000 = \$71,609	\$ 312,486



## Black Start Costs by Zone (Historical vs. 2 Proposals)

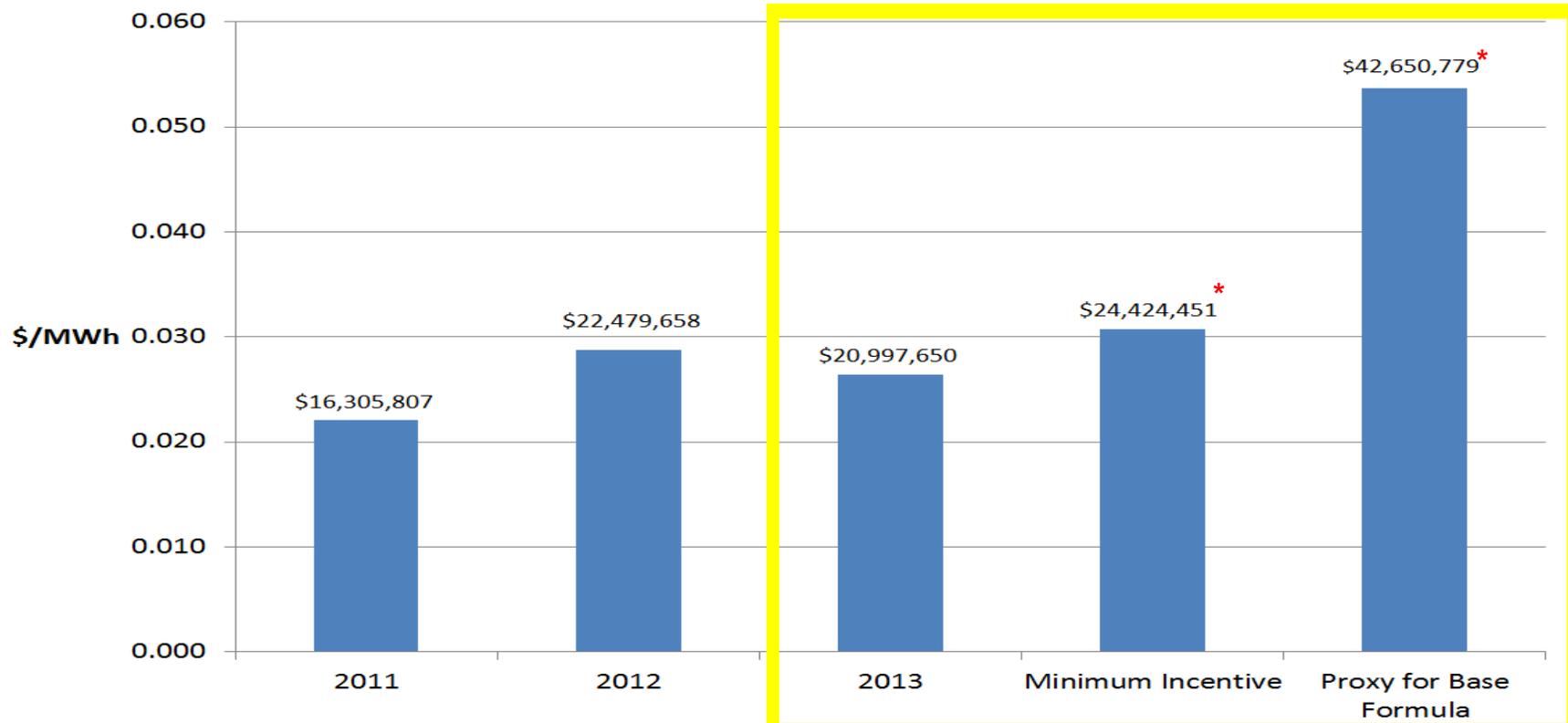
Transmission Zone	Revenue Requirement 9/1/2011	Revenue Requirement 9/1/2012	Revenue Requirement 9/1/2013	Minimum Incentive Proposal	Proxy for Base Formula Replacement
AECO	\$587,375.76	\$612,749.80	\$659,039.18	\$849,126.54	\$2,210,244.00
AEP	\$641,304.41	\$1,065,072.31	\$713,841.68	\$1,100,196.98	\$1,955,964.00
APS	\$163,108.11	\$263,640.01	\$293,618.98	\$391,926.34	\$885,337.00
ATSI	\$110,933.66	\$170,352.21	\$121,530.86	\$160,482.60	\$624,972.00
BGE	\$3,258,715.57	\$8,220,357.01	\$5,212,388.17	\$5,299,327.26	\$6,894,242.76
COMED	\$3,607,130.48	\$5,175,988.79	\$4,394,846.18	\$4,558,736.61	\$5,233,355.84
DAY	\$166,374.93	\$245,123.31	\$259,735.15	\$436,122.86	\$1,061,523.00
DEOK		\$331,699.42	\$1,211,017.72	\$1,216,925.45	\$1,674,002.69
DOM			\$1,069,397.17	\$1,069,397.17	\$1,069,397.17
DPL	\$534,124.05	\$543,207.62	\$587,724.57	\$1,009,295.07	\$2,938,570.00
DUQ	\$40,729.08	\$53,404.09	\$61,788.81	\$61,788.81	\$61,788.81
EKPC			\$387,247.88	\$402,043.52	\$869,913.00
JCPL	\$541,191.23	\$328,467.96	\$608,508.56	\$626,403.28	\$1,726,848.68
METED	\$541,937.33	\$478,493.70	\$897,429.93	\$897,617.32	\$897,617.32
PECO	\$1,266,963.40	\$1,379,460.78	\$1,548,942.76	\$2,108,129.78	\$7,316,155.00
PENELEC	\$367,061.09	\$573,457.48	\$525,051.98	\$535,152.14	\$1,557,651.75
PEPCO	\$462,700.00	\$212,074.47	\$325,972.27	\$325,972.27	\$325,972.27
PPL	\$157,515.64	\$152,847.12	\$251,989.60	\$569,078.44	\$1,814,081.00
PSEG	\$3,858,641.94	\$2,673,261.66	\$1,867,588.19	\$2,806,728.73	\$3,533,143.00
<b>PJM TOTAL</b>	<b>\$16,305,806.68</b>	<b>\$22,479,657.74</b>	<b>\$20,997,659.64</b>	<b>\$24,424,451.18</b>	<b>\$42,650,779.31</b>

\*Values based on existing Black Start fleet as of 9/1/13



# Total RTO Black Start Costs (with per MWh cost)

## SRSTF Compensation Proposal Comparison with Annual Black Start Cost per MWh



\*Values based on existing Black Start fleet as of 9/1/13