



Black Start Tariff Section 6.4 Issues

MRC

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- BSS tariff initially designed to address existing black start units
- Tariff treatment of new black start investments is unclear
- Goal is to clarify tariff treatment of new black start investments
- Process requirements:
 - Members agreement and/or
 - FERC decision
- Owners retain option to file directly with FERC

- Capital recovery typically over investment life
- Capital recovery under recent black start filings is two to five years with request for existing tariff treatment thereafter
- Result is double recovery of capital costs when combined with current tariff rate for balance of investment life
- Result is higher rates of return without an explicit FERC decision
- No match between payments and obligation

- Tariff treatment of new black start units is unclear
- Ensure appropriate incentives for new black start units
- Ensure appropriate agreement term for new black start units
- Ensure appropriate cost recovery term for new black start units
- Ensure that commitment by seller to provide black start service is consistent with life of black start investment
- Ensure that commitment by buyers to purchase black start service is consistent with life of black start investment

- Ensure that FERC has responsibility for regulatory decisions:
 - Rate of return in CRF factors
 - Rate of return for incentive payments

- Treatment of existing black start units
- Treatment of new black start investments made in recent years
 - Payments over remaining investment life after accelerated full capital recovery
- Treatment of new entry black start investments in the future
 - Payments over investment life
 - Payments after investment life



Examples of Payment Alternatives - 2

- Col 1. Apply CRF factors (12% IRR) for 20 years
 - NPV = \$925,293; IRR = 12%
- Col 2. Apply CRF factors (18% IRR) for 20 years
 - NPV = \$1,148,399; IRR = 18%
- Col 3. Apply CRF factors (24% IRR) for 20 years
 - NPV = \$1,384,050; IRR = 24%



Illustration of Impacts - 2

Year	PJM Cost Based Method 12.0 % IRR	PJM Cost Based Method 18.0 % IRR	PJM Cost Based Method 24.0 % IRR
2007	\$98,133	\$121,795	\$146,787
2008	\$98,133	\$121,795	\$146,787
2009	\$98,133	\$121,795	\$146,787
2010	\$98,133	\$121,795	\$146,787
2011	\$98,133	\$121,795	\$146,787
2012	\$98,133	\$121,795	\$146,787
2013	\$98,133	\$121,795	\$146,787
2014	\$98,133	\$121,795	\$146,787
2015	\$98,133	\$121,795	\$146,787
2016	\$98,133	\$121,795	\$146,787
2017	\$98,133	\$121,795	\$146,787
2018	\$98,133	\$121,795	\$146,787
2019	\$98,133	\$121,795	\$146,787
2020	\$98,133	\$121,795	\$146,787
2021	\$98,133	\$121,795	\$146,787
2022	\$98,133	\$121,795	\$146,787
2023	\$98,133	\$121,795	\$146,787
2024	\$98,133	\$121,795	\$146,787
2025	\$98,133	\$121,795	\$146,787
2026	\$98,133	\$121,795	\$146,787
NPV	\$925,293	\$1,148,399	\$1,384,050
IRR %	12.1%	18.0%	24.0%

- Col 1. Full capital cost recovery in 2 years
 - Tariff rate for 18 years
 - NPV = \$3,044,040; IRR = 117.5%
- Col 2. Full capital cost recovery in 2 years
 - One half tariff X-factor rate for 18 years
 - NPV = \$2,060,003; IRR = 104.6%
- Col 3. Full capital cost recovery in 5 years
 - Tariff rate for 15 years
 - NPV = \$2,550,384; IRR = 54.6%



Examples of Payment Alternatives - 3

- Col 4. Full capital cost recovery in 5 years
 - One half tariff X-factor rate for 15 years
 - NPV = \$1,844,581 ; IRR = 50.2%
- Col 5. PJM tariff rate for 20 years
 - Full PJM Tariff Formulaic Rate for 20 Years
 - NPV = \$2,614,444 ; IRR = 56.4%



Illustration of Impacts - 3

Year	2 Yr Offer then PJM Tariff	2 Yr Offer then One Half PJM Tariff	5 Yr Offer then PJM Tariff	5 Yr Offer then One Half PJM Tariff	Full PJM Tariff All Years
2007	\$520,000	\$520,000	\$261,000	\$261,000	\$277,277
2008	\$520,000	\$520,000	\$261,000	\$261,000	\$277,277
2009	\$277,277	\$148,797	\$261,000	\$261,000	\$277,277
2010	\$277,277	\$148,797	\$261,000	\$261,000	\$277,277
2011	\$277,277	\$148,797	\$261,000	\$261,000	\$277,277
2012	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2013	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2014	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2015	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2016	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2017	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2018	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2019	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2020	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2021	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2022	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2023	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2024	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2025	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
2026	\$277,277	\$148,797	\$277,277	\$148,797	\$277,277
NPV	\$3,044,040	\$2,060,003	\$2,550,384	\$1,844,581	\$2,614,444
IRR %	117.5%	104.6%	54.6%	50.2%	56.4%