

Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Valley Forge Corporate Center Eagleville, PA 19403

Phone: 610-271-8050 Fax: 610-271-8057

DATE: May 13, 2020 TO: PJM Members

FROM: IMM

SUBJECT: Black Start MTLS Problem Statement

Minimum Tank Suction Level

- 1. Many Black Start units have shared fuel tanks between the Black Start unit and facilities with units in the energy market.
- 2. The tariff does not clearly state how shared resources such as fuel tanks should be treated.
- PJM has required that customers pay black start unit owners carrying cost recovery for one hundred percent of the MTSL for tanks which are shared with units in the energy market.
- 4. In some cases these tanks were sized to meet the needs of the generating units, which use significantly more fuel than the black start units. In some instances the MTSL is greater than the total amount of fuel that the black start unit needs to operate to meet its black start obligations. When a black start diesel is added at the site of an oil-fired generating unit, the additional MTSL is zero.
- 5. The IMM believes the intent of the tariff is that only costs directly related to Black Start service should be includable.
- 6. The MMU recommends that for oil tanks which are shared with other resources that only a proportionate share of the MTSL be allocated for black start units. The MMU further recommends that the PJM tariff be updated to clearly state how the MTSL will be calculated for black start units sharing oil tanks
- 7. Black Start MTSL = Black Start Tank Ratio × MTSL Where:

$$Black Start Tank Ratio = \frac{Unit Fuel Burn Rate \times Minimum Run Hours}{Tank Capacity - MTSL}$$