



Variable Operations & Maintenance Costs (VOM) Summary of PJM Proposed Package

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PJM believes that major overhauls and inspections should be included in a generator's cost based energy offers because:

- Generators should expend VOM cost in order to recover those costs
- All resources should be treated equally – the rules are currently different for CCs and CTs.

NOT RUN

ACR

Avoidable Cost Rates

FIXED

Avoidable costs

- Plant Staff
- Taxes
- Fees
- Insurance
- Carrying Charges
- Fuel Availability

RUN

VOM-M15

Variable Operations and Maintenance – Manual 15

ONE TO TEN YEARS

Major overhauls and inspections

- CT Hot Gas Path Inspections
- Turbine Overhaul
- Boiler Overhaul
- CT and CC Overhaul & Major Inspection Excluded June 15, 2015

ANNUAL

Annual repairs from operating

- Pump/Valve Repair
- Boiler Tube Leak Repair
- CT Air Filter Replacement

OPERATING DAY

Short run marginal cost

- Short Run Marginal Cost
- Water
- Chemicals
- Consumables

NOT RUN

ACR

Avoidable Cost Rates

FIXED

Avoidable costs

- Plant Staff
- Taxes / Fees/ Insurance
- Carrying Charges
- Fuel Availability
- Energy Only Resources and units that did not clear can include ACR fixed cost in VOM

RUN

VOM-M15

Variable Operations and Maintenance – Manual 15

ONE TO TEN YEARS

Major overhauls and inspections

- CT Hot Gas Path Inspections
- Turbine Overhaul
- Boiler Overhaul
- CT and CC Overhaul & Major Inspection
- FERC accounts cost minus labor

ANNUAL

Annual repairs from operating

- Pump/Valve Repair
- Boiler Tube Leak Repair
- CT Air Filter Replacement
- FERC account cost minus labor

Operating Costs

OPERATING DAY

Short run marginal cost

- Short Run Marginal Cost
- Water
- Chemicals
- Consumables

- Only actual maintenance costs attributed to running the unit and directly tied to electric production can be included in a unit's incremental energy offer.
 - CT and CC major inspection, overhaul and LTSA cost can be included
 - Capacity units cannot include ACR fixed cost (i.e. normal labor & maintenance not tied to running)
 - Energy Only Resources and units that did not clear in the Delivery Year auctions can include ACR fixed cost
 - FERC Accounts minus labor cost can be included
 - Remove fixed Title V and emissions fees
- Immature units can use existing history (less than 10 years) or defaults

- Operating costs can be included in a unit's incremental energy offer but not its VOM.
 - Allowable operating costs include lubricants, chemicals, Limestone, Trona, Ammonia, acids, caustics, water injection, and demineralizers.
 - Market Sellers will be allowed to include additional operating costs via the 1.8 exception process. Acceptable items will be added to M15 during the biennial revision.

- Operating Costs changes
 - Implement operating costs changes upon Manual 15 approval
- Units that did not include VOM costs in their capacity offer for the current Delivery Year.
 - Implement VOM changes upon Manual 15 approval.
- Units that did include VOM costs in their capacity offer and cleared for the current Delivery Year
 - Implement VOM changes June 1 of the first Delivery Year where the VOM costs are not included in the unit's capacity offer.
- Units that did not clear in the current Delivery Year and Energy Resources
 - Include fixed costs in VOM After FERC approval

- Three proposed VOM packages were voted on at the April MIC. Two packages received greater than 50% endorsement:
 - Default VOM Package (81% endorsement) – allow resources to utilize either actual maintenance costs attributed to running the unit and directly tied to electric production in a unit’s incremental energy offer (PJM Package) or a default value for Variable O&M, no greater than the new build data published by the U.S. Energy Information Administration (EIA).
 - PJM Package (75% endorsement) – only actual maintenance costs attributed to running the unit and directly tied to electric production can be included in a unit’s incremental energy offer.

- MRC endorsement – 7/26/2018
- MC endorsement Tariff & Manual 15– 7/26/2018
- Board approval Manual 15 – August 2018