

## **Tip Sheet for Reporting on Form EIA-860, “Annual Electric Generator Report”**

### **I. Schedule 3A, Line 10: Can This Generator Deliver Power to the Transmission Grid**

Indicate if the generator can or cannot deliver power to the transmission grid in the absence of contractual restrictions. If the system interconnection physically allows power flow in either direction then the proper response is yes.

### **II. Schedule 3B, Line 1, Schedule 3D, Line 1, Generator Nameplate Capacity**

Report the highest value on the nameplate in megawatts rounded to the nearest tenth. If the nameplate capacity is expressed in kilovolt amperes (kVA), convert to kilowatts by multiplying the corresponding power factor by the kVA, divide by 1,000 to express in megawatts to the nearest tenth.

Nameplate capacity is not expected to change unless the generator is rewound, this field is read-only to the respondents. Common errors in reporting this value:

- Using capacity data from the prime mover’s nameplate: Prime movers such as turbines are typically rated in terms of kW (MW). Many generator nameplates, particularly those on large units, have kVA (MVA) ratings, but do not have a kW (MW). Since the turbine and the generator nameplates are often located close to each other, the turbine kW (MW) rating is sometimes incorrectly selected rather than the generator kVA (MVA) rating.
- Improper conversion of a kVA (MVA) value to the proper corresponding kW (MW) value. In the absence of the kW (MW) value on the generator portion of the nameplate, the kVA (MVA) rating should be converted to kW (MW) via the relationship described above.

If the nameplate data needs to be changed please contact the survey manager.

### **III. Schedule 3B, Line 2 and Schedule 3D, Line 2: Net Capacity:**

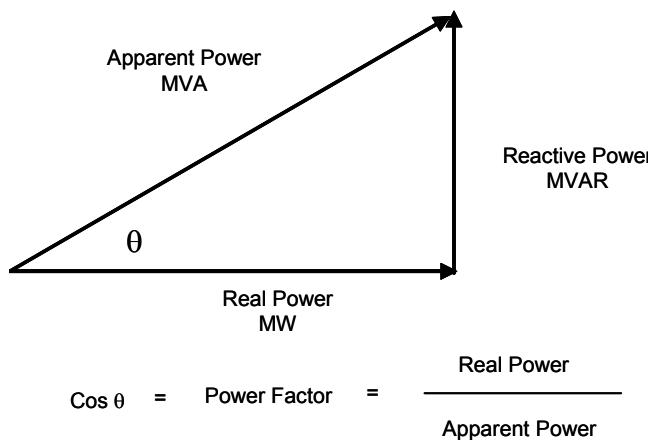
DO NOT introduce factors such as availability of energy sources and constraints on transmission when determining the summer capacity and winter capacity to be reported on Form EIA-860. However, the net capacity should reflect a reduction in capacity due to electricity use for station service or auxiliaries.

For generators that are out of service for an extended period , on standby, have no generation or no test results for the respective peak periods of the data year , report the estimated capacities based on historical performance as follows: for net summer capacity and net winter capacity of generators that fall into either of the prior mentioned

categories, report the capacity of the generator that is generally achievable during the period of June through September and December through March, respectively, based on historical performance or report the best estimate of the capacity that could be achieved if the generator were operated during the respective summer and winter periods.

#### **IV. Schedule 3B, Line 3, Schedule 3D, Line 3: Reactive Power Output**

Enter the maximum rated reactive power output (MVARs) for the generator. If the rated power factor (pf) for the generator is not known or is not available, use a power factor of 0.85, lagging. (A MVAR is a Mega Voltampere Reactive.) The reactive power output can be calculated from power factor and nameplate capacity as shown below.



#### **V. Schedule 3B, Line 5: Synchronized to the Grid,**

If the status code entered on line 5 is standby or back-up, please note if the generator is currently equipped such that, when operating, it can be synchronized to the grid. Many generators backup and standby applications can provide power to their system only upon the loss of primary power. If the configuration is such that the generator can not operate in parallel with primary power then the proper response is "no".

#### **IV. Schedule 3B, Line 8, Schedule 3D, Line 7, Schedule 3E, Line 2 : Combined Heat and Power**

A generator is considered to be a combined heat and power (CHP) generator if the heat or steam from the prime mover (e.g., engine, turbine) or boiler is used to drive a generator to produce electricity and is also used for another process such as heating a building, operating machinery, or other industrial process. Producing electricity can be either the primary or secondary objective of the process. Steam that is captured after it passes through the turbine and is then used for heating or perhaps sent to an outside customer is

an example of a CHP generator. Similarly, another example of a CHP generator is the use of boiler steam to drive both a electric generator and a mechanical drive application.