

[This was discussed at the work group but no consensus was reached..BMS]

Compensation for Generators for Supplying Reactive within the required (0.95 leading/lagging power factors)

- **BPA recognizes that this is a requirement of interconnection to the transmission grid to support reliability.**
- **Just as reserve obligations are currently imposed on generators in the WSCC, these obligations are not uncompensated.**
- **Many of BPA's generators are rated at power factors greater than 0.95. For example, Grand Coulee generators are rated at unity and when they are required to provide/absorb reactive power, the result is a cost to BPA's Power Business Line.**
- **FERC has approved an embedded cost methodology to compensate generators for a portion of the electrical plant, recognizing that a portion of the electrical equipment was sized to produce/absorb reactive power.**
- **There are also real power losses that result from the production of reactive power (stator, rotor and no load losses) at any power factor.**
- **BPA also provides synchronous condensing capability at the Dalles and John Day and there are real power losses that result from the motoring of those units.**

Recommendation:

BPA recognizes the difficulty with tracking lost opportunity costs within the (0.95 leading and lagging band) but proposes that a demand type charge be developed to capture the costs (could be done using the FERC approved methodology). Losses should also be compensated.

Outside the band lost opportunity costs, and losses may be acceptable.

Synchronous condenser costs should also be compensated.