

1    Q.    **Re: Project B-5 Unit 1 and Unit 2 Generator Stator Rewind**

2           Does operating a Unit in synchronous condensing mode (once converted to that  
3           capability) result in wear and tear on the stator windings?  
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6    A.    Yes, operating a unit in synchronous condensing mode still requires the use of the  
7           rotor and stator and as a result will cause wear and tear on the stator windings.  
8           When operating in synchronous condensing mode the unit is operating as a motor,  
9           driven by the power from the electrical grid as opposed to providing power to the  
10          grid when it is operating as a generator. The wear and tear of the stator as a  
11          winding synchronous condenser will be similar to what it experiences as a  
12          generator, such as electrical stresses from surge voltages and currents, as well as  
13          heating. Since the stator is electrically connected in exactly the same way in either  
14          generator or synchronous condenser mode, and it is carrying an operating current  
15          up to the MVA rating of the unit, the stator winding will be exposed to the same  
16          thermal and electrical stresses in either mode of operation.