**General Physics Update for Modules 6 and 13**

The SPP Training department conducted a review of General Physics Modules 6 and 13 and has determined that the resources necessary to rewrite those modules are not available at this time. In the review, it was determined that SPP Training would determine the resources necessary to consolidate existing information for Module 6: Roles of SPP and NERC and Module 13: Operating Constraints and Considerations - Transmission. We propose taking the course objectives for each module and providing avenues for the student to access information which addresses the objectives. As an example, module objectives are below with possible additional learning mediums.

### Module 6

**Objectives:**

1. Identify interconnections in North America and describe the benefits and responsibilities of operating as part of an interconnected system. – [Intro to SPP Presentation from SPP.ORG](http://www.spp.org/publications/Intro_to_SPP_presentation.pdf)

2. Describe the history and organization of Southwest Power Pool (SPP); explain the purpose of the SPP Reliability Criteria Guides. – [Intro to SPP presentation and the SPP Criteria document located on SPP.ORG](http://www.spp.org/criteria) – entitled SPP Criteria 11 and information pulled from the Net Conference SPP Criteria

3. Describe the history and organization of the North American Electric Reliability Council (NERC); state the purpose of the NERC Operating Guides. – [Manual information is current, with additional link(s) to www.nerc.com site](http://www.nerc.com)

4. Explain the responsibilities SPP members have to operate their systems within NERC and SPP guidelines. – [Manual information is current.](http://www.nerc.com)

### Module 13

**Objectives:**

1. Define reliable operation and explain why reliable operation is important to the electric system. – [Manual information is current](http://www.nerc.com)

2. Identify monitoring tasks and control actions the system operator performs to maintain equipment loadings within SPP operating limits. – [An SPP SME will need to be involved to research and pull available and current information](http://www.nerc.com)

3. Describe control actions the system operator uses to maintain system voltage within SPP operating limits. [SPP Net Conference materials Voltage Control](http://www.nerc.com)

4. Under normal transmission system conditions, describe how the electric system is affected by routine operator actions on the system. *Generally SPP gears its training to “emergency procedures” or abnormal circumstances - I would assume that what is currently written in the manual as "normal conditions" would be the same. A SME will review.*

Generally, the ratio of design and development time is 25 hours for every hour of learning. If we choose to use the method mentioned above, it will take approximately .35 FTE one month to compile the existing information into a single, organized document.