

BPM End-to-End Test Procedure
October 24, 2005

Preparation:

1. Start BPM test application
 StartUp path: Start/Commissioning/RHIC BPM Signal Testing
 Program name: RhicBpmAlcoveTest
2. Print the BPM test application window for each selected location and bring printout to testing location for markup.
3. Be sure that the wireless and NX are available at testing locations.

At Location:

1. Configure function generator to 350 KHz sine wave, 5 Volts.
2. Start BPM test application
 StartUp path: Start/Commissioning/RHIC BPM Signal Testing
 Program name: RhicBpmAlcoveTest
3. General testing notes
 - a. Test each BPM in order according to the BPM test application location list.
 - b. Disconnect one BPM signal at a time and connect to the function generator.
 - c. Include the attenuator in the signal path.
 - d. For each BPM, test the A signal first (out/up), then test the B signal (in/down).
4. Select the location to be tested using the test application location pull down menu.
5. Confirm that the Mode for all BPMs in the location indicate RING. If RING is not indicated, correct the BPM IFE module operation as required.
6. Disconnect BPM signal to be tested from the ring end. Include the attenuator in the signal path.
7. Connect the function generator output to the BPM cable.
8. Click the Trigger button.
 Expected result:
 The plot displays the expected waveform on the expected BPM sitewide name and expected A or B signal. The expected BPM in the application table turns green
9. If the expected result is displayed apply a check, initial, and date the hardcopy BPM list.
10. If the expected result is not displayed, note the actual result on a separate list, correct the problem, and retest.
11. Reconnect the BPM cable.
12. Repeat steps 6 to 12 for each BPM cable.