Instructions for Creating an EPICS

1. Start with the example EPICS document: TC50xxx_exampleTestEPICS.tpi. This is our starting template for an EPICS of a standard small device. It includes every section. You can edit this file with Notepad or another ASCII editor. Rename it with your TC number. Then, edit this sample EPICS file until it matches your device.

2. Drop out any objects or object types that your device does not have.

3. Remove (and mark as F in the protocol-services-supported bitstring) any services that your device does not support.

4. Remove or revise in the BACnet Standard Application Services Supported: section all the services that your device supports for Initiate and/or Execute.

5. Specify a value of a single "?" character for any BACnet properties for which the value is changing, or unknown. It is fine to have a lot of unspecified "?" values.

6. Constrain the ones that you know should be a specific value, so that the lab's testing will flag if that is not their observed value. The rest can be unspecified "?" values, and it will suffice.

7. Use a single letter "W" after their value for all writeable properties. Indicate all the writeable or conditionally writeable properties that will be in the device that you send. We need it in testing as the document in this format drives four of our testing scripts. Writeability means that the device returns the Result(+) SimpleACK-PDU to the WriteProperty-Request.

8. Mention in IUT Special Test instructions, any that immediately revert their values, so the tester knows to expect the reversion after write to another value. It is required by BACnet that your device returns the Result(-) BACnet-Error-PDU with 'Error Class' PROPERTY, 'Error Code' VALUE_OUT_OF_RANGE to any that your device will not accept. It is not permitted to return SimpleACK-PDU to a value that is refused.

9. For any Proprietary objects, if tested in BTL Testing: Encode and decode all of their property values correctly into BACnet. Make sure they appear in the Object_List. Make sure they send proper results when ReadPropertyMultiple is sent with the special ALL or REQUIRED parameters.