

Main Injector RF Control Application (PA1677, I3) - Bug #8298

Inconsistent behavior when setting anode program past "Max HV"

04/10/2015 12:25 AM - Kyle Hazelwood

Status:	New	Start date:	04/10/2015
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
<p>I3 attempts to block settings to the anode program that exceed a calculated "Max HV" in MeV/Turn. This "Max HV" is calculated in [hv.cpp > rinit()] as:</p> $rfmax = hvp.par.tubmax * hvp.par.tubgain * cs->pars[PAR_RFNUM] / 1000.$ <p>Where pars[PAR_RFNUM] is the number of RF stations active and hvp.par.tubmax is the maximum tub voltage (kv) found in appdb.wu.i3_parameters and hvp.par.tubgain is average RF cavity tube gain found in appdb.wu.i3_parameters</p> <p>However, the operators have reported seeing the warning that occurs when reaching the "Max HV" threshold and still occasionally being able to set the values higher.</p> <p>I suspect what is happening may be related to the number of stations declared in I3. When this was first reported to me there were a couple MI stations left off and then turned on that day. Unfortunately, I have virtually no way of telling if any of the other parameters were edited because of issue: 8297.</p>			
Related issues:			
Related to Main Injector RF Control Application (PA1677, I3) - Feature #8297:...		New	04/09/2015

History

#1 - 04/10/2015 12:27 AM - Kyle Hazelwood

- Related to Feature #8297: RF parameters table added

#2 - 04/10/2015 12:36 AM - Kyle Hazelwood

- Subject changed from *Inconsistent behavious when setting anode program past "Max HV"* to *Inconsistent behavior when setting anode program past "Max HV"*

- Description updated

#3 - 04/10/2015 12:38 AM - Kyle Hazelwood

For reference: <https://www-bd.fnal.gov/Elog/?entryIDs=48716>