

## SETTING-UP PROTONS HRS 2007

End Line:

**ISOLDE HRS** 

Intensity:

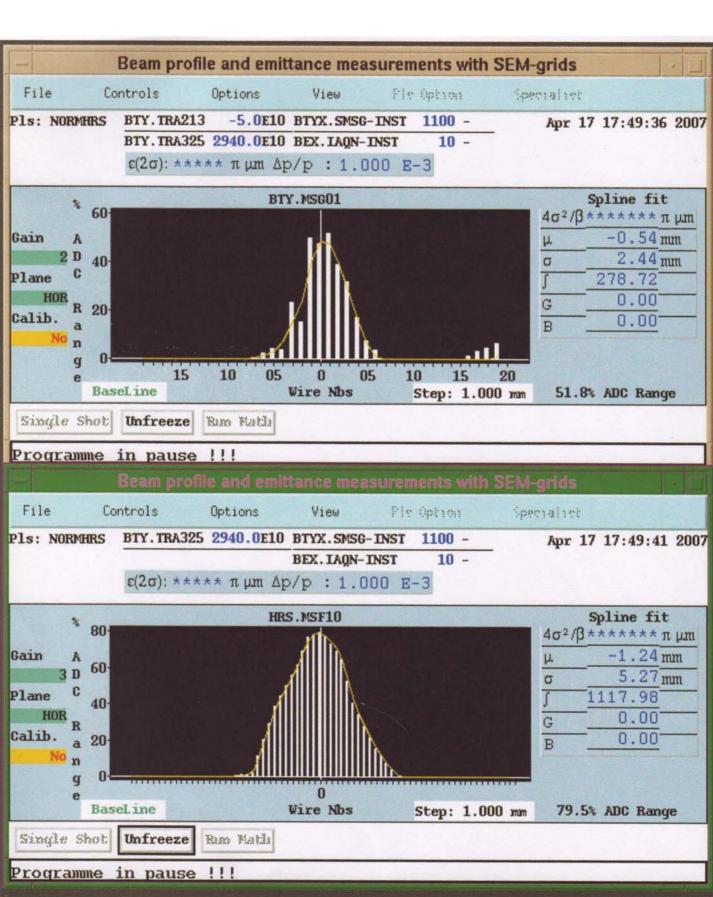
3.0<sup>E</sup>13ppp (high)

Focus:

Standard Focus

Plane:

**HRS** Horizontal



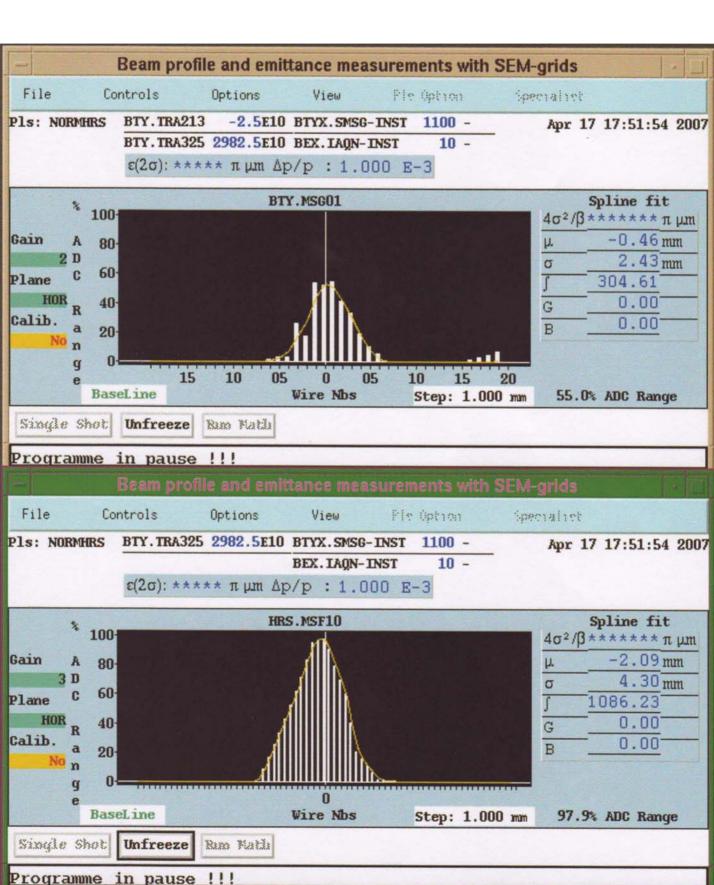
End Line: **ISOLDE HRS** Intensity: 3.0<sup>E</sup>13ppp (high) Focus: Standard Focus Plane: **HRS Vertical** Beam profile and emittance measurements with SEM-grids File Controls Options View Fig Option Specialist BTY. TRA213 0.0E10 BTYX.SMSG-INST Pls: NORMHRS 1100 -Apr 17 17:50:34 2007 BTY.TRA325 2982.5E10 BEX.IAON-INST 10 - $\epsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$ : 1.000 E-3 BTY.MSG01 Spline fit 60-4σ2/B\*\*\*\*\* π μm -0.92 mm Gain 2 D 2.57 mm 40 O Plane 287.93 0.00 G 20 Calib. 0.00 B q 15 10 05 05 BaseLine Wire Nbs Step: 1.000 mm 55.3% ADC Range Single Shot Unfreeze Rum Math Programme in pause !!! File Controls Options View Fir Option Specialist BTY.TRA325 2982.5E10 BTYX.SMSG-INST Pls: NORMHRS 1100 -Apr 17 17:50:33 2007 BEX. LAON-INST  $\epsilon(2\sigma)$ : \*\*\*\*\*  $\pi \mu m \Delta p/p$ : 1.000 E-3 HRS.MSF10 Spline fit 100 402/B\*\*\*\*\* π um Gain -0.64 mm 80 5.00 mm O 60 Plane 1152.64 40 0.00 G Calib. 0.00 B 20 q BaseLine Wire Nbs Step: 1.000 mm 89.7% ADC Range Unfreeze Single Shot Rum Kath Programme in pause !!!

End Line: ISOLDE HRS

Intensity: 3.0<sup>E</sup>13ppp (high)

Focus: Waist of beam on Target

Plane: HRS Horizontal

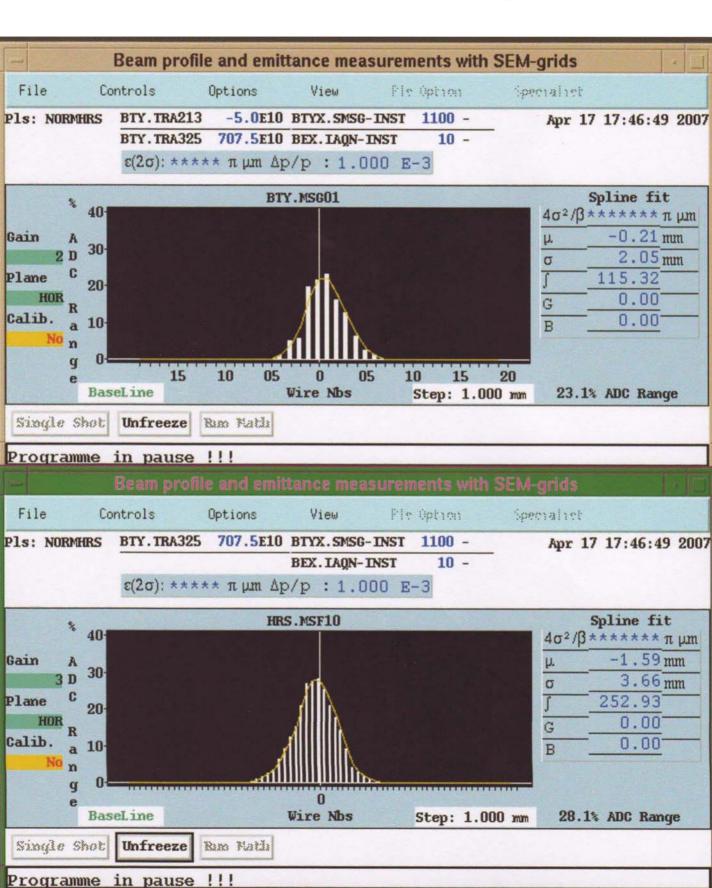


End Line: **ISOLDE HRS** Intensity: 3.0<sup>E</sup>13ppp (high) Focus: Waist of beam on Target Plane: **HRS** Vertical Beam profile and emittance measurements with SEM-grids File Controls Options View Fis Option Specialist Pls: NORMHRS BTY. TRA213 -5.0E10 BTYX.SMSG-INST 1100 -Apr 17 17:51:25 2007 BTY.TRA325 2942.5E10 BEX.IAON-INST 10 ε(2σ): \*\*\*\* π μm Δp/p : 1.000 E-3 BTY.MSG01 Spline fit 60 4σ2/B\*\*\*\*\* π μm Gain -0.46 mm J. 2 D 2.20 mm 40 O Plane 281.45 0.00 G 20 Calib. 0.00 B 15 10 05 05 10 15 BaseLine Wire Nbs Step: 1.000 mm 53.0% ADC Range Single Shot Unfreeze Rim Math Programme in pause !!! File Controls Options View Fir Option Specialist BTY.TRA325 2942.5E10 BTYX.SMSG-INST Pls: NORMHRS 1100 -Apr 17 17:51:25 2007 BEX. LAON-INST 10 - $\epsilon(2\sigma)$ : \*\*\*\*\*  $\pi \mu m \Delta p/p$  : 1.000 E-3 Spline fit HRS.MSF10 100-4σ2/B\*\*\*\*\* π um Gain 0.33 mm U. 80-3.73 mm O 60-1025.26 Plane 0.00 40 G Calib. 0.00 B 20 n q BaseLine Wire Nbs Step: 1.000 mm 100.0% ADC Range Unfreeze Single Shot Rum Math Programme in pause !!!

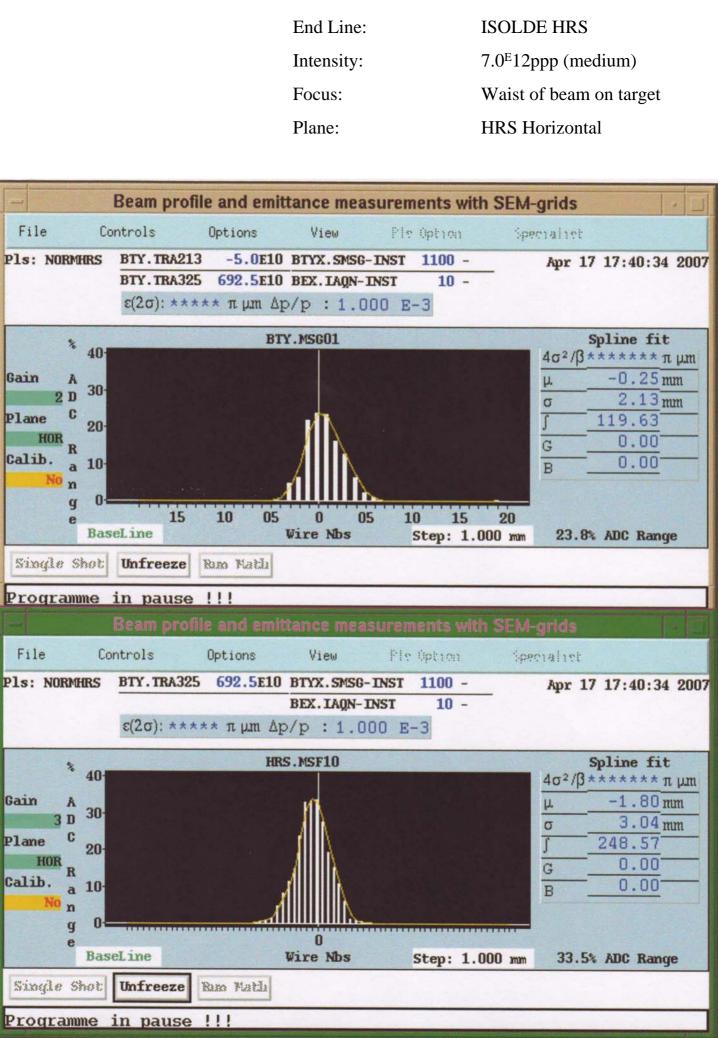
End Line: ISOLDE HRS
Intensity: 7.0<sup>E</sup>12ppp (medium)

Focus: Standard Focus

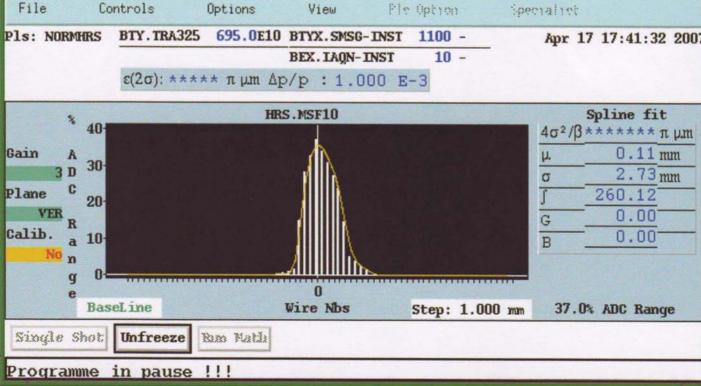
Plane: HRS Horizontal



End Line: **ISOLDE HRS** 7.0<sup>E</sup>12ppp (medium) Intensity: Focus: Standard Focus Plane: **HRS Vertical** Beam profile and emittance measurements with SEM-grids File Controls View Options Fis Option Specialist BTY. TRA213 -7.5E10 BTYX.SMSG-INST 1100 -Pls: NORMHRS Apr 17 17:44:35 2007 705.0E10 BEX. LAON-INST BTY. TRA325 10 - $\varepsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$ : 1.000 E-3 BTY.MSG01 Spline fit 20.0 4σ2/β\*\*\*\*\* π μm Gain -1.00 mm J. 15.0 1.99 mm Plane 83.51 10.0 VER 0.00 G Calib. 0.00 5.0 0.0 q 15 10 05 10 05 15 BaseLine Wire Nbs Step: 1.000 mm 19.9% ADC Range Single Shot Unfreeze Rum Math Programme in pause !!! File Controls Options View Fle Option Specialist BTY. TRA325 705.0E10 BTYX.SMSG-INST Pls: NORMHRS 1100 -Apr 17 17:44:35 2007 BEX. LAON-INST 10 - $\epsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$  : 1.000 E-3 HRS.MSF10 Spline fit 40-4σ2/β\*\*\*\*\* π μm Gain -0.41 mm J. 30-3.70 mm O Plane 251.10 20 0.00 G Calib. 0.00 10-B g BaseLine Wire Nbs Step: 1.000 mm 26.6% ADC Range Unfreeze Single Shot Rm Fath Programme in pause !!!



End Line: **ISOLDE HRS** Intensity: 7.0<sup>E</sup>12ppp (medium) Focus: Waist of beam on target Plane: **HRS Vertical** Beam profile and emittance measurements with SEM-grids Options View Fie Option Specialist BTY.TRA213 0.0E10 BTYX.SMSG-INST 1100 -Apr 17 17:41:32 2007 BTY. TRA325 695.0E10 BEX. LAON-INST  $\varepsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$ : 1.000 E-3 BTY.MSG01 Spline fit 4σ2/B\*\*\*\*\* π μm -0.68 mm 1.77 mm O 94.79 0.00 G 0.00 10 05 05 10 15 20 Wire Nbs Step: 1.000 mm 22.7% ADC Range Rum Katir Programme in pause !!! Options View Fie Option Specialist 695.0E10 BTYX.SMSG-INST 1100 -Apr 17 17:41:32 2007 BEX. LAON-INST



File

Gain

Plane

Calib

Single Shot

Pls: NORMHRS

Controls

401

30-

20-

10-

BaseLine

15

Unfreeze

End Line:

ISOLDE HRS

Intensity:

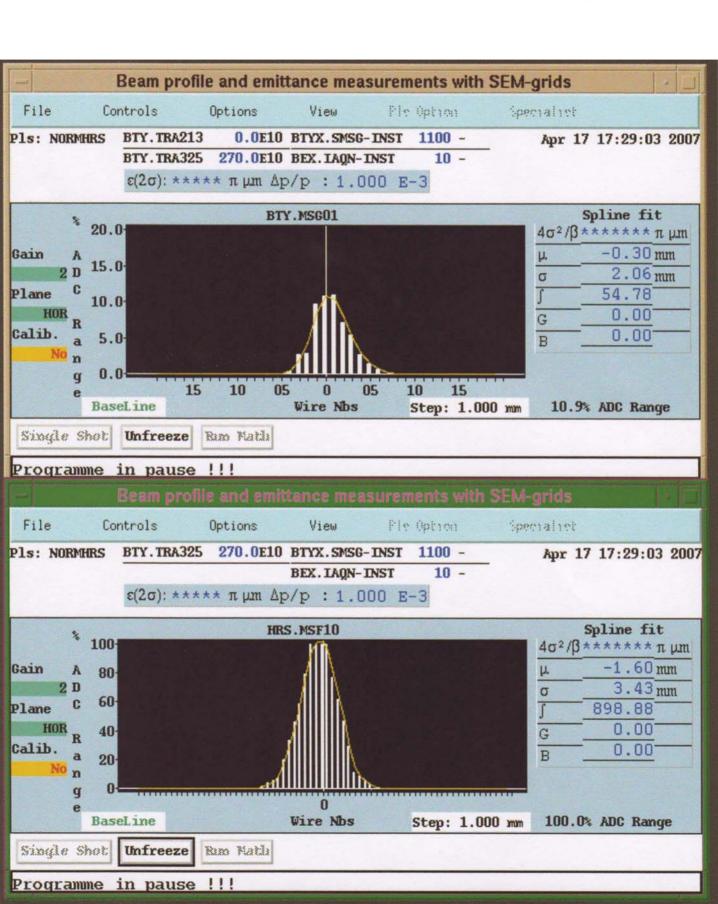
2.7<sup>E</sup>12ppp (low)

Focus:

**Standard Focus** 

Plane:

**HRS** Horizontal

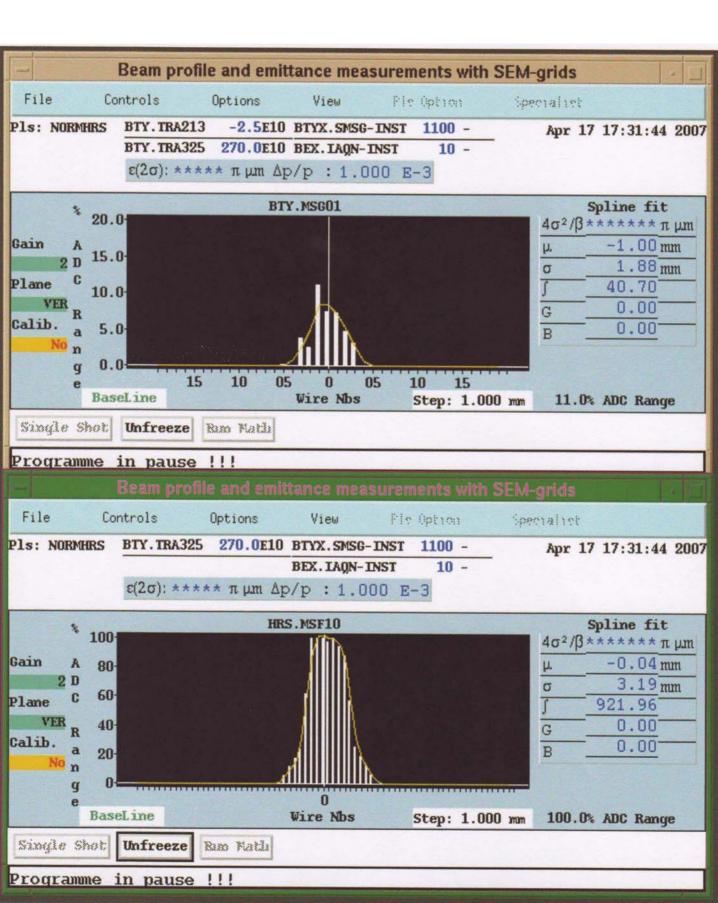


End Line: ISOLDE HRS

Intensity: 2.7<sup>E</sup>12ppp (low)

Focus: Standard Focus

Plane: HRS Vertical

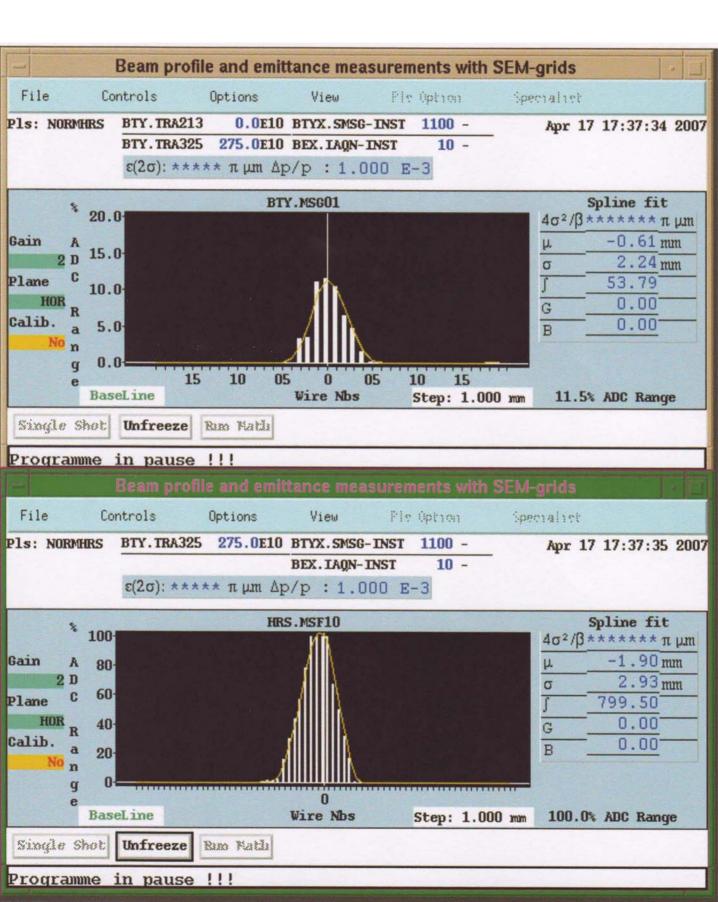


End Line: ISOLDE HRS

Intensity: 2.8<sup>E</sup>12ppp (low)

Focus: Waist of beam on target

Plane: HRS Horizontal



End Line: **ISOLDE HRS** Intensity: 2.8<sup>E</sup>12ppp (low) Focus: Waist of beam on target Plane: **HRS Vertical** Beam profile and emittance measurements with SEM-grids File Controls Options View Pic Option Specialist BTY. TRA213 0.0E10 BTYX.SMSG-INST Pls: NORMHRS 1100 -Apr 17 17:36:26 2007 277.5E10 BEX. LAON-INST BTY. TRA325 10 - $\epsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$ : 1.000 E-3 BTY.MSG01 Spline fit 20.0 4σ2/B\*\*\*\*\* π μm -0.47 mm Gain 15.0 1.68 mm O Plane 48.11 10.0-0.00 G Calib. 0.00 5.0 В 0.0 15 10 05 05 BaseLine Wire Nbs Step: 1.000 mm 13.0% ADC Range Single Shot Unfreeze Rum Math Programme in pause !!! File Controls Options View File Option Specialist Pls: NORMHRS BTY. TRA325 277.5E10 BTYX.SMSG-INST 1100 -Apr 17 17:36:26 2007 BEX. LAON-INST 10 - $\epsilon(2\sigma)$ : \*\*\*\*  $\pi \mu m \Delta p/p$  : 1.000 E-3 Spline fit HRS.MSF10 100-4σ2/B\*\*\*\*\* π um 0.38 mm Gain 80 J. 2.57 mm 2 D O 60 Plane 794.22 40 0.00 G Calib. 0.00 B 20 n g BaseLine Wire Nbs Step: 1.000 mm 100.0% ADC Range Single Shot Unfreeze Rum Kath Programme in pause !!!

- Working	Set: PSB:ISOLDE-S	TEE_BEND - PS	B.USER.NORM	HRS F
File Edit View	References Comman	nds Control Pro	ograms	Help
2 0 + ■ • A	pr 17 18:17:03 PSB -	NORMHRS 3	9	
NORMAL view				
POW-V	Status	CCV	AON	Unit
BTM.DHZ10DMP	Status On	-15.99	AQN -7.01	Unit A
BTM.DHZ10ISO	On.	-7.00	-7.01	A
BTV.DHZ118	On.	1.06	1.05	A
BTY.DHZ124	. On	-0.59	-0.59	A
BTY.DHZ152	0n	3.00	3.00	A
BTY.DHZ201	- On	0.50	0.51	A
BTY.DHZ211 BTY.DHZ303	On	0.00	0.02	A
BTY.DHZ323	On On	0.00	0.00	A
POW-V	Status	CCV	AQN	Unit
BTM.DVT10DMP	On On	-6.59	1.10	A
BTM.DVT10IS0	0n	1.10	1.10	A
BTY.DVT118	0n	-0.50	-0.50	A
BTY.DVT124	0n	4.20	4.21	A
BTY.DVT152	0n	-4.80	-4.81	A
BTY.DVT201	0n	0.00	0.00	A
BTY.DVT212	0n	0.00	0.02	A
BTY.DVT303 BTY.DVT324	On On	7.00	7.01	A
	On On	0.10	0.11	A
POW-V BT.BHZ10ML	Status On	CCV	AQN	Unit
BT.BHZ10PS	On On	-376.95 0.00	-376.96 -376.96	A
BTM.BHZ10	On	450.80	449.87	A
BTY.BVT1010MP	0n	0.00	446.81	A
BTY.BVT101IS0	. On	443.55	446.81	A
BTY.BVT116	Qn	452.00	452.57	A
BTY.BHZ301GPS	0n	0.10	448.19	A
BTY.BHZ301HRS	- On	449.52	448.19	A
BTY.BHZ308	On On	454.00	454.31	A
GFAS	Enable	Delay	Ampl.	Unit
BTY.GSDIP	Enabled	338.00	10.00	
PTIM-V	Pulse CCV	AQN	Start	Train
BX.SGSISO	Enabled 335	The state of the s	X.F900-EJEC	1-KHz
BX.EGSIS0 BX.GBHZ10AND301	Enabled 150 Enabled 150	150	BEX.AMC-CT	1-KHZ
DA. GDNZIOANUSUI	Enabled 150	150	BEX.F550	1-KHz

- WorkingSet	t: PSB:ISOLDE-I	FOCAL - PSI	B.USER.NOR	MHRS	
File Edit Viev	w References C	ommands C	ontrol Progra	ıms Helj	p
9/ A + BA	Apr 17 18:18:01	PSR - NORM	HRS 9 8		
	, (p) 11 10:10:01	TSB NORM	1116 g 0		
NORMAL view					
POW-V	Status	CCV	AQN	Unit	4
BT.QNO4ODMP	On On	206.26	204.46	A	
BT.QNO40ISO	0n	204.41	204.46	A	
BT.QNO4OPS	0n	257.33	204.46	А	
BT.QNOSODMP	0n	175.00	174.60	A	
BT.QNOSOISO	0n	175.18	174.60	A	
BT.QNOSOPS	On On	174.74	174.60	A	
BTM. QNOOSDMP	0n	128.04	128.05	A	
BTM.QN005ISO	- On	128.04	128.05	A	
BTM.QN010DMP	. On	-172.15	-172.15	A	
BTM.QN010IS0	0n	-172.17	-172.15	A	
BTM.QN020DMP	0n	-171.84	-171.81	A	
BTM.QN020IS0	0n	-171.84	-171.81	A	
BTY.QDE104	0n	182.20	182.22	A	
BTY, QF0108	0n	134.95	134.96	A	
BTY.QDE113	0n	182.26	182.28	A	
BTY.QF0119	0n	124.61	124.61	А	
BTY.QDE120	0n	198.53	198.52	A	
BTY.0F0122	0n	77.33	77.31	A	
BTY.QF0148	. On	47.31	47.31	A	
BTY.QDE151	0n	113.90	113.89	A	
BTY.QF0153	0n	77.06	77.05	A	
BTY.QF0179	0n	107.00		A	
BTY.QDE182	0n	164.07		A	
6TY.QF0184	0n	105.12		A	
BTY.QDE209	0n	133.13		A	
BTY.0F0210	0n	140.81		A	
BTY.0F0304	0n	155.62	The same of the sa	A	A
BTY.QDE310	0n		182.52	A	
BTY.QF0311	0n	153.53		A	
BTY.QDE321	On	186.11		A	
BTY.0F0322	On On	182.74	The state of the s	A	