

542680



Date: March 16, 2006

To: David Kessel, 6821

From: Jennifer Long, 6821

Subject: Installation of OpenVMS version 8.2-1 on the WIPP Alpha Cluster and Regression Testing

Currently, the primary WIPP computing platform consists of a cluster of four AlphaServers, comprised of two ES40s and two ES45s. This cluster runs the OpenVMS O/S, version 7.3-1. The PA department is acquiring four more ES47 AlphaServers which will also run the OpenVMS O/S. Since Hewlett Packard discontinued support for OpenVMS version 7.3-1 in January, 2005, we will install OpenVMS version 8.2-1 on the new and current AlphaServers.

Introduction of the new operating system and hardware requires regression testing of all the VMS WIPP PA codes, and this testing will be conducted under *SP 19-1, Regression Testing for Software Modifications or Platform Changes for the VMS Alpha Cluster*. Table 2 in Attachment A contains a list of all of the codes that will be tested. Each of the codes will have their own regression test report. Since the software baseline contains multiple versions of the same code, only a subset of these codes is required to conduct a full set of PA calculations. Table 3 in Attachment A contains the list of codes required to conduct a full PA, and completion of the regression testing of these codes will satisfy completion of the external milestone, IN-06-07.

The supplier Newman Group has supplied the new AlphaServers, and John Geilow plans to install the operating system on these machines by March 25<sup>th</sup>. We plan to begin regression testing following this installation on March 27<sup>th</sup>. Table 1 lists the key personnel who will be involved with the regression testing activities.

**Table 1 Regression Testing Tasks and Personnel**

Tasks	Key Personnel
Installation of New AlphaServers and O/S	John Geilow
Run Control	Jennifer Long
Run Control Support	Bart Buell, Amy Gilkey
Analysis and Documentation of Testing	Janis Trone, Brian Fox
Quality Assurance Oversight	Mario Chavez

cc:

- |              |              |              |               |
|--------------|--------------|--------------|---------------|
| Eric Vugrin  | Sean Dunagan | Jim Garner   | Christi Leigh |
| Janis Trone  | Amy Gilkey   | Martin Nemer | Doug Edmiston |
| Brian Fox    | Bart Buell   | Joe Kanney   | Dave Rudeen   |
| Mario Chavez | John Geilow  | Tom Kirchner | Bill Kelly    |
| Dan Rolsma   | Steve Davis  | Mark Rigali  |               |

## Attachment A- VMS Codes to be Regression Tested

Table 2 contains a listing of all VMS codes and versions that will be regression tested. Table 3 lists all of the VMS codes that are required for a full set of PA calculations.

**Table 2 VMS Codes and Versions to be Regression Tested**

ALGEBRA 2.35	GENII-A 2.10	POSTLHS 4.07A
BLOTCDB 1.37	GENMESH 6.08	POSTLHS 4.07
BRAGFLO 5.0	GROPECDB 2.12	POSTSECOTP2D 1.04
BRAGFLO 4.10	ICSET 2.22	PREBRAG 7.00
CAMCON LIB 2.20	LHS 2.42	PREBRAG 6.00
CAMDAT LIB 1.25	LHS 2.41	PRECCDFGF 1.01
CAMSUPES LIB 2.22	LHS2STEP 1.04	PRECCDFGF 1.00D
CCD2STEP 1.08	MATSET 9.10	PREGENII 6.30
CCDFGF 5.02	NONLIN 2.0	PRELHS 2.30
CCDFGF 5.01A	NUCLOT 1.20	PRESECOTP2D 1.22
CCDFSUM 2.00	NUTS 2.05A	RELATE 1.43
CUTTINGS S 6.02	NUTS 2.05B	SDBREAD LIB 3.11
CUTTINGS S 6.01	PANEL 4.03	SECOTP2D 1.41A
CUTTINGS S 5.10	PANEL 4.02	SECOTP2D 1.41
DRSPALL 1.10	PATTRN 1.00	SPLAT 1.02
DRSPALL 1.0	PCCSRC 2.21	STEPWISE 2.21
EPAUNI 1.15A	PLT LIB 2.04	SUMMARIZE 3.00
EPAUNI 1.15	POSTBRAG 4.00	SUMMARIZE 2.20
FMT 2.4	POSTGENII 4.20	SUMMARIZE 3.01

**Table 3 VMS Codes and Versions Required for a Full Set of PA Calculations**

ALGEBRACDB 2.35	NUTS 2.05A
BRAGFLO 5.0	PANEL 4.03
CAMCON LIB 2.20	PLT LIB 2.04
CAMDAT LIB 1.25	POSTBRAG 4.00
CAMSUPES LIB 2.22	POSTLHS 4.07A
CCDFGF 5.02	POSTSECOTP2D 1.04
CCDFSUM 2.00	PREBRAG 7.00
CUTTINGS S 6.02	PRECCDFGF 1.01
DRSPALL 1.10	PRELHS 2.30
EPAUNI 1.15A	PRESECOTP2D 1.22
FMT 2.4	RELATE 1.43
GENMESH 6.08	SDBREAD LIB 3.11
GROPECDB 2.12	SECOTP2D 1.41A
ICSET 2.22	STEPWISE 2.21
LHS 2.42	SUMMARIZE 3.01
MATSET 9.10	