NIRSPEC

UCLA Astrophysics Program

U.C. Berkeley

W.M.Keck Observatory

May 12, 1999

John Canfield

NIRSPEC Cryomechanics Application Note 06.00 Power Outage Procedure

This procedure deals only with cryo-mechanical implications of a power outage.

- If power is restored before the internal pressure rises above 100 millitorr then the CCR's can be immediately re-started. Temperatures should return to operational levels relatively soon. (< 1day).
- ! If the internal pressure has risen above 100 millitorr, the instrument will have to be pumped before re-starting the CCR's.

Use the following procedure as a guideline;

1. Allow instrument temperatures to rise well above 77K (~125K) to prevent backstreaming to the pump.

2. Attach and pump instrument to <100 millitorr (if time permits, 25 millitorr or less is optimum).

3. Begin filling LN_2 tank and re-start CCR's.

- 4. Maintain LN_2 for 18-24 hours
- 5. Evacuate LN₂ tank and resume normal cryogenic operation