

The APF has had a failure where the FCUs were under power but could not be controlled. This is the procedure for powering them manually in the event of, for example, a failure of the dcc (dome control computer.)

The cooling system has three pieces. Cold water is brought in from outside. That cold water can run through a heat exchanger or just go back to the chiller outside. To push air across the heat exchanger, there are fans.

The fans can fail off for a variety of reasons. Also, the cold water valves can end up closed. Below I have section for enabling each.

Manually Enabling the Fans

On the first floor of the dome, by the rack containing the dome control computer, are two fuse cabinets. These are located below the cable wrap and can be easily reached by walking to the left of the dome control computer (to the left of the stairs to the higher levels.)



Each has a switch mounted on the side which will turn on the fans. The Fuse Cabinets for Fan Controller Units 1 and 2, showing the switches to turn the fans can be seen to the left.



The Fuse Cabinets for Fan Controller Unit 2, close up of the switch in the manual position are shown to the left.

Opening the Cold Water Valves

If the fans are blowing but there is little or no cold air, it is likely that the valves are closed. To open the valves, open the cabinets that the switches are attached to.



Turn switch number 3 into the off position.



The valve for FCU 2 is to the left of the fuse box and is mounted sideways. Turn it to the full on position. Those valve knobs have to be pushed in while turning.



The valve for FCU 1 is mounted on the wall of the dome in between the two air vents (see below.) Turn it to the on position, the opposite of the picture below.

Open Door to Second Level

Use the fan to draw cold air from second level to first level.

In dry, safe conditions, the vent doors can be opened to provide more cool outside air if the first level FCU has serious issue.

