Ordering TPC gas (methane and Argon) valid summer 2008

We order methane and Argon from Praxair, who are the official suppliers of gas for all of BNL. However, the ordering goes through different paths.

Methane:

STAR owns three sixpacks (6 1A size cylinders ganged together on a cart). The STAR sixpacks are made up of silver colored cylinders that are marked BNL, STAR and 1006. The bottles were recently re-certified by Praxair and don't need to be certified again until 2012. Praxair usually will repair any damage to the manifold on top of the six pack. For normal operation we only use these 3 six packs since we know they only have had high purity methane in them. As a back up emergency I keep on hand a Praxair owned six pack (red bottles) to be used only if none of ours are available. This happened in 2007 because of the Christmas and New Year's holidays and a problem with one of our 6 packs.
We use "Ultra High Purity" methane (Praxair grade 3.7). which should have O2 < 10 ppm and N2 < 40 ppm. One six pack under normal usage (i.e. recirculation mode) lasts 2 weeks. Praxair usually sends a truck for pickup and delivery once a week on Tuesday, and it takes 2 weeks to refill a 6 pack. So, under normal usage, one 6 pack is in use, one is in standby, and one is being filled.

To order a pickup or to check on delivery:

1. Call Praxair at 1-800-772-4059
2. Ask for our account rep, who is currently Jennie. Identify yourself as being from BNL and Bldg 1006 - use my name to jog her memory!
3. Tell her you have a methane 6 pack ready for pickup and confirm if they have one coming back.
4. Make sure the 6 pack for pickup is rolled out to the edge of the covered area on the gas pad. The truck usually comes at ~ 8:30 on Tuesdays and I try and be around when he delivers. The driver will load and unload.
5. The methane is paid for using a BNL standing PO. Usually once a year it has to be refilled with money by transferring funds from STAR. Contact Liz Mogavero or Bob Soja to arrange this.

ARGON:

We have a 900 gallon liquid Ar tank on the gas pad. The tank is rented from Praxair and they are responsible for maintenance and repair, if needed. (We've never had a problem.) We pay a monthly rental fee and for bulk LAr when the tank gets filled. As for methane, there is a standing PO to pay for the rental and LAr which gets renewed every year - see Liz or Bob for particulars. The quantity on hand in the tank is measured by a gauge at the tank - measurement is in inches. A full tank is 120 inches and we usually call for a refill when the tank gets to 30 inches. (We are required to keep sufficient product on hand to

purge the TPC in an emergency, hence the limit of 30.) The contract requires Praxair to fill the tank within 48 hours of our phone call. You do not have to be present for the delivery - the driver knows what to do and refilling does not interfere with the Ar flowing to the TPC gas system. The driver is already qualified to get past the BNL gate and the posted signs if we are running. The driver will leave the invoice in a green canister at the tank.
For normal operation, a full tank will last 2 months. If STAR is shutdown a small amount of gas is still used by the PMD group and the rest is lost to boil off - in this case a full tank lasts 3 months. We never let the tank warmup - to refill a warm tank takes ~ 50% more LAr, so it is cost effective to always keep it cold.

To order a refill:

1. Call 1-800-praxair (1-800-772-9247)
2. It is an automated system to start with - select the choices to order product for an existing account.
3. When asked, enter our Praxair number - 8523548
4. An operator will come on the line - tell her you want a refill of our tank. She will ask you the reading and when it was taken and your name etc. Request the fill within 48 hours. She will give you a confirmation number.
5. Hang up.
6. Check after 48 hours that the tank got filled - note that I normally don't ask for delivery over the weekend or after hours because of possible BNL gate or receiving problems.

A folder labeled "Supply-Gas" with historical documents (initial spec on the tank etc) and past order history is kept in my desk drawer at the counting house.