Construction of the CALICE scintillator tile HCAL prototype has just started and is foreseen to be finished mid 2005, so that with the present planning the calorimeter could be ready for a test-beam run at FNAL before the end of next year.

The primordial goal would be an extensive running period in combination with the CALICE ECAL. Stand-alone HCAL running is considered to be useful for improved detector understanding, but would add only a fraction (less than 50%) of the beam time needed for the combined run.

The request for beam time is based on the same arguments and reasonings which were put forward for the initial ECAL run. A similar number of energy points and angular configurations are needed (6 and 3, respectively), and the same number of events per point and configuration (10^6). Since the data acquisition is common to ECAL and tile HCAL, the envisaged data taking rates and running times are also the same.

We still point out a few points particular to the ECAl + HCAl runs:

- The large sample sizes are needed not only to allow tighter beam selection but also to analyze the hadron shower data as a function of observables which cannot be pre-configured, like the electromagnetic energy fraction, the number of hadronic interaction vertices, or the longitudinal and lateral containment. Such studies are needed for the optimization of both the single particle energy reconstruction using weighting methods, as well as for particle flow algorithm development.
- Since the differences between models depend on the particle type, and since protons are particularly important to infer properties of the response to neutrons, samples of both pions and protons of adequate size each are needed, in addition to electron data. Kaons would be desirable, too. In order to prepare a running strategy, the sample purities achievable with the existing particle identification devices must be known.
- The energy range between 1 and 10 GeV for hadrons is of particular importance for the confrontation of hadron shower simulation programs with test beam data; the codes sue different models in different energy ranges, and aspects specific to low energies cannot be tested with data taken at higher energies.
- The scintillator HCAL is not as stable as the Si-Tungsten ECAL and would strongly benefit from the availability of muon beams for calibration purposes repeatedly during a running period of several weeks.
- In addition, dedicated muon runs at different energies and angular settings are needed for muon tracking studies in the combined ECAL + HCAl + Tail Catcher system.

Given the required larger variety of particle types and the extended energy range, we estimate that a beam period of 8 weeks, if possible split into two parts, would be needed for the combined ECAL + HCAL run, and at least two weeks of HCAl stand-alone running in addition. If the data acquisition rate was limited by the spill structure to below 100 Hz, these estimates would scale accordingly.