uses daily screens to turn them off if they are not economical to run. Once all
other inputs have been set, final NPC are determined after a series of GRID runs
to screen out the uneconomic commitment of gas-fired plants. The screens are set
in a manner that prevents the gas-fired plants from being committed to run if they
displace less expensive resources taking into consideration start-up costs and
other operational constraints of starting up and shutting down gas units.

280 Q. Has the Company modified the outputs from GRID to provide more 281 information to facilitate such screens?

A. Yes. The Company has implemented a new release of GRID that has a new report
consolidating several individual reports necessary for the screening process, as
requested by OCS and directed by the Commission.

285 **3. Start-Up Fuel Energy Value**

286 Q. How did the Commission decide the issue of the value of start-up energy in 287 the 2009 Rate Case Order?

A. The Commission stated on page 34 of its 2009 Rate Case Order that "(w)e will accept the Company's explanation in this case and make no adjustment to value start-up energy. However, in the future the Company must demonstrate quantitatively that the value associated with GRID model simplifications offsets the value of start-up energy."

293 Q. Why does the Company believe that it is inappropriate to model the value of 294 start-up energy in GRID?

A. Start-up costs are not limited to fuel. In order to accommodate the start-up of a
500 to 600-megawatt gas unit, the Company must re-dispatch the system. In doing

297 so, the Company incurs costs beyond what it would have incurred had the start-up 298 not occurred. These costs could result from ramping down the lower-cost hydro 299 and thermal units to lower efficiency levels, and increasing generation from 300 higher-cost units prior to when they are needed. None of these costs are included 301 in GRID. In addition, if start-up energy is to be considered, the multi-hour start-up 302 sequence must also be considered. The end result is that the units would need to 303 stay offline and be unavailable for a longer time in order for the adjustment for 304 start-up energy to be applicable.

305 Q. Did the Company perform a study to quantify one of the aspects mentioned
306 above -- extending minimum down time of the units?

307 A. Yes. Extending the minimum down time for those gas-fired units in GRID and
308 using the same methodology proposed by the Division of Public Utilities
309 ("DPU"), the system NPC increases by approximately \$0.6 million.

310 Q. Is the impact of increasing NPC limited to the value stated above?

- A. No. As discussed above, extending the minimum down time is only one of the aspects that need to be considered in modeling the start-up energy of the gas-fired units. Incorporating the other aspects in NPC, (e.g., less efficient operation of hydro and thermal units) would increase NPC further.
- 315 4. Chehalis Start-up Costs
- 316 Q. How did the Commission rule on the issue of Chehalis start-up costs?
- A. The Commission stated on page 39 of its 2009 Rate Case Order that "(a)s the
 Chehalis plant has limited operational data, we will accept use of the Currant
 Creek derived data for this case as a reasonable proxy at this time. In the next