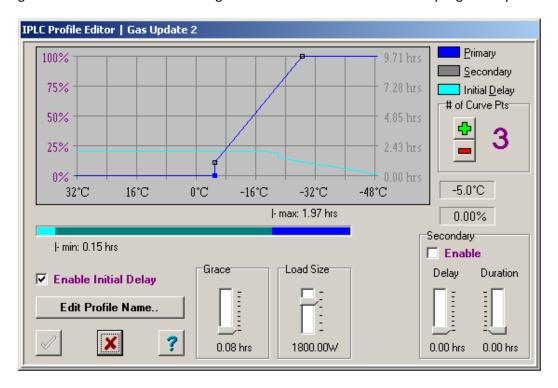
## Intelligent Parking Lot Controller (IPLC) Programming at UAF

**Short Explanation:** Power is provided for a few minutes, turned off for two hours and then cycled. As it gets colder the outlets are on longer each hour and the two hour delay is gradually reduced.



More Detailed Explanation: Most all IPLC's at UAF are currently programmed as above.

When a vehicle is plugged in the following events happen in order:

- 1. **GRACE PERIOD** Power is provided first during the grace period no matter what the temperature. The grace period is programmed at .08 hours (4.8 minutes)
- 2. **INITIAL DELAY** After the grace period the initial delay takes over. No power is provided during the initial delay. The initial delay is set at 2 hours if the temperature is greater than -20C (-5F). Between minus 20 and -48 C (-55F) the initial delay gradually reduces to zero. (See the white line on the graph above.
- 3. **PRIMARY SCHEDULE** (Blue line on graph above) After the initial delay the IPLC begins cycling the power based upon the primary schedule and the sampled air temperature at the IPLC. The units cycle power in two minute intervals. For example: If the temp is -8 C the primary schedule above calls for 25%. This means power will come on for 30 seconds and be off for 90 seconds. Note the power is also alternated between outlets so during scenario power is applied first to the left outlet and then to the right.
- 4. **SECONDARY SCHEDULE** It is possible to program a secondary period without power at a period of time after the vehicle has been plugged in. This feature is not currently used at UAF.