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# Light of the World

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Minutes - 4.1.13

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**Leader:** Brian

**Note Taker:** Sean

- ❖ Discuss this week's progress
  - 3.3V supply improvements
  - Breakthrough on LED supply
- ❖ Electronics:
  - 3.3V Power Supply
    - Addition of linear regulator
      - Perhaps we could move to a PIC24 if the WiFi work isn't too dedicated to the PIC18 - input regulation does not affect operating frequency.
    - How best to minimize transients
    - Look at close-to-final layout
  - LED Power Supply
    - Decision on flyback topology
    - Transformer prototypes
- ❖ Realistic packaging goals
  - This will influence board design, and the **deadline for boards is the end of next week**
- ❖ Other discussion items:
  - Need to use optocoupler in 3.3V supply - separates high voltage from microcontroller side, and to ensure correct ground reference
  - How to interface with powerlines:
    - Through-hole or screw terminals - second has advantage that it can be removed and reapplied if necessary
  - **Absolutely must submit boards by the end of next week (Friday, April 12<sup>th</sup>)**
- ❖ Upcoming deadlines
  - Design Review II -- prior to Apr. 9
  - Pre-demo Demo -- Apr. 22-Apr. 26
  - Demo and Documentation of Working Prototype -- May 3