## **OPTIONS FOR DEFINING AVOIDED ENERGY COSTS**

**Option A** (per the handout from the meeting, with clarifications and the addition of an annual lump-sum true up):

Using a production model the following steps are used to calculate the marginal energy rates:

- 1. System-wide hourly marginal energy cost is calculated for each hour of the future year.
- 2. Based on (1), the average on-peak and off-peak marginal energy costs are calculated for each month.
- 3. Peak-season months are aggregated and the average on-peak marginal energy cost is calculated for the peak period; non-peak months are aggregated and the average on-peak marginal energy cost is calculated for the non-peak period. Off-peak marginal energy costs are aggregated over the entire year.
- 4. Following the calculations in (3), the on-peak rate for the peak season is set at the average on-peak marginal energy costs in the peak months. Similarly, the average on-peak marginal energy rate in the non-peak months is set at the average on-peak marginal energy costs in the off-peak months. The off-peak marginal rate is calculated as the average off-peak marginal costs over the 12-month period. Thus, the energy tariff have the following three rates:

| On-peak for peak season     | \$/kWh |
|-----------------------------|--------|
| On-peak for non-peak season | \$/kWh |
| Off-peak                    | \$/kWh |

5. At the end of the year, a lump-sum true up is used to reflect the difference between estimated and actual energy costs.

## **Option B**:

Using a production model the following steps are used to calculate the marginal energy rates:

- 1. System-wide hourly marginal energy cost is calculated for each hour of the future year.
- 2. Based on (1), the average on-peak and off-peak marginal energy costs are calculated for each month.
- 3. The on-peak monthly rate is set at the average on-peak marginal energy costs. The off-peak monthly energy rate is set at the average monthly off-peak marginal costs. Thus, there are 24 rates set for the year, with an on-peak and off-peak rate set for every month.

4. At the end of the year, a lump-sum true up is used to reflect the difference between estimated and actual energy costs.

Note: one question that was raised for Option B is whether there is a need for a true-up since it is expected that the rate would reflect estimated costs better than in Option A. As such, it is possible that the administrative costs of a true-up may outweigh the expected benefits of a true-up in Option B, at least for some utilities.

Also, the benefits of true-ups are expected to be different for utilities that produce most of their electricity as opposed to purchasing significant amounts of energy on the market.