Time of Use (TOU) as a default rate: issues and insights from the Consumer Behavior Studies

Annika Todd, Phd
Lawrence Berkeley National Lab

October 2015
California and Massachusetts have both committed to transitioning residential class to TOU as default within next several years.

Other states are beginning to have similar discussions (e.g., New York).

Issues about at-risk populations of customers and how to make the transition successful for them.
Households in study population

Randomize

- **Control** – not encouraged, not contacted
- Encouraged not to opt-out of a **default** TOU rate
- Encouraged to opt-in to a **voluntary** TOU rate

SMUD Study – a very well designed RCT → insights into key questions
Why consider a default TOU rather than a voluntary TOU?

- Lower recruitment costs
- Higher enrollment rates
- Many extra people on TOU!
But...who are those extra people?

**Complacent:** they go with the flow

- They don’t opt-out if defaulted onto TOU
- They also don’t opt-in to a voluntary TOU
Key issues: how will the *Complacent* react to the TOU?

1. Will they change their energy behavior at all?
2. Will they find out they’re on TOU and then hate it?
3. Are they even aware they’re on the TOU?

→ Our study can provide (some) answers!
1. Will they change their energy behavior? Any load reductions? Yes!

- Complacents do reduce peak period energy
- More cost effective:
  - Many more people
  - Each responds less
  - Plus marketing costs lower

![Average hourly peak period demand reduction chart]

Complacents
1. Will they change their energy behavior? Any load reductions? Yes!

- Complacents do reduce peak period energy, just not as much
- More cost effective!
  - Many more people
  - Each responds less
  - Plus marketing costs lower
2. Will they find out they’re on TOU and then hate it and drop out? **No!**

- No mass exodus of Complacents after the TOU started
- In fact, people who opted-in to voluntary program dropped out more!
3. Are they even aware they’re on the TOU? Some are... but some are not

On average, Complacents:
- Reduce peak energy usage
- Save on bills

→ Some complacents are changing their behavior!
Survey:

• Complacents are **less likely to respond to survey**

• For those that do respond, complacents are:
  ▪ Less informed about what rate plan they were on
  ▪ Less likely to recall “Welcome Back” package
  ▪ More likely to check “neutral” box for most questions

→ Some Complacents may be less engaged, have limited attention
What does this mean for the transition to TOU as a default rate?

- Default TOU → more households enrolled in TOU
  - Extra households = Complacents
- Complacents are responsive to TOU
- Complacents don’t drop out
- But, some Complacents may be unengaged
  → Identify and connect with the unengaged
  → Make opt-out process easy
Contact:
Annika Todd
atodd@lbl.gov