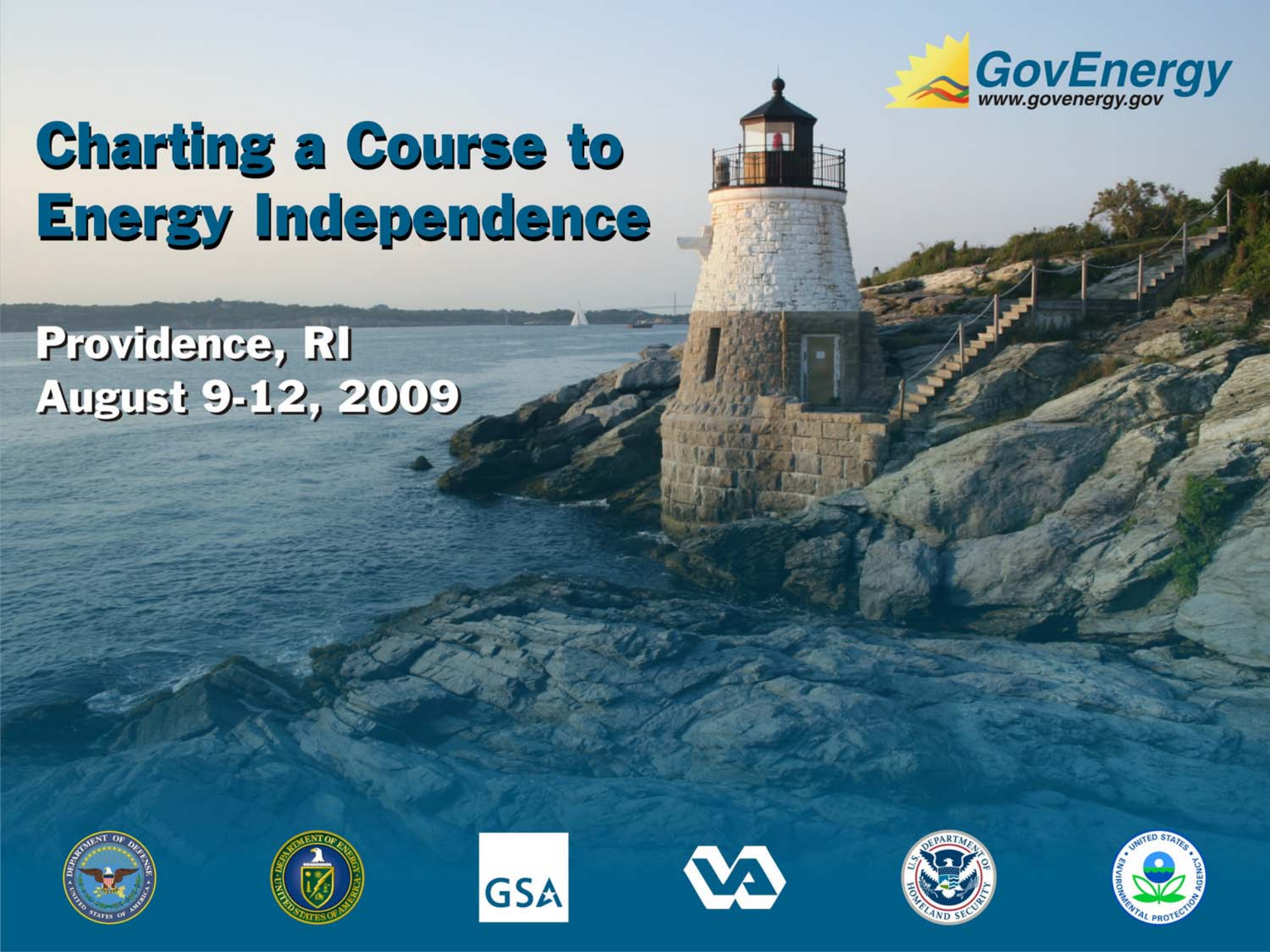
GovEnergy
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Charting a Course to Energy Independence
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Lighting Maintenance and Strategies

- What do you have now?
  - T12s, HIDs, get rid of them now!
  - T8s, to many lamps/fixture?
  - T5s, what is your true cost?
  - So you think LED is the next thing?
  - What is the “best way” to capture maintenance savings?

T12s and HIDs

- Energy HOGS! Get rid of them, NOW!
- Retrofit the T12s, replace the HIDs with energy efficient fluorescent fixtures.
- T12s and HIDs degrade and cost operational dollars. Frequent lamp changes cost maintenance dollars.

T8 lamps

- Longest lasting lamps, 42,000 hours(12 hr. starts), less frequent lamp changes = maintenance savings.
- Standardize lamps across the facility, doesn't matter where the lamp is out, office, warehouse, it is a T8.
- De-lamp 4 lamp fixtures, especially during a retrofit of T12s. Spectrally enhanced lumen package will equal or better existing light levels.

T5 Systems

- Long lasting lamp, 35,000 hrs.
- Ballast and lamp cost are 50% higher than T8, but much better than T12s.
- Excellent choice for HID replacements above 24’.
- Spectrally enhanced light provides a better lighting envelope.

LEDs

- Make sure you ask the right questions
  - How do you thermally manage heat in an existing fixture when it has not been tested?
  - Cost? Lumens/watt/cost is the test.
  - Without thermal management, the system WILL Fail! At 132 degrees, LED fails in 4 years
  - For every 1.8 degrees is temperature rise, the LED suffers a permanent degradation of .5 lumens.

What you can do now for maintenance savings.

- Standardize your lamps and ballasts.
  - Reduces inventory cost
  - Reduces maintenance trips
  - Predictable budgeting costs
- Institute a relamp program
  - Predictable budget
  - Every time someone climbs a ladder, it cost money
  - Put a relamp into your UESC/ESPC contract at today's dollars