

Drone Technology and Environmental Monitoring

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Exelon Generation®

Commercial sUAS FAA Requirements

FAA 333 Exemption

Required to fly drones
commercially prior to 8/16

Exelon received the 333
exemption 2/16 – 16 month
process

Licensed airplane pilot
required to fly drones

FAA registered drone

FAA Part 107

Requirements to fly drones
commercially after 8/16

Allows more flexibility for
commercial operations of
drones

Qualified remote pilot in
command to fly drones

Online FAA registered drone



Future?

Wind Inspections



- Blade inspections
- Tile field inspections
- Improved safety
- Reduced outage times
- Reduced O&M costs



Wildlife / Habitat Surveys



- Osprey & Falcon nesting sites
- Threatened & Endangered species
- Stressed vegetation
- Impacted habitats



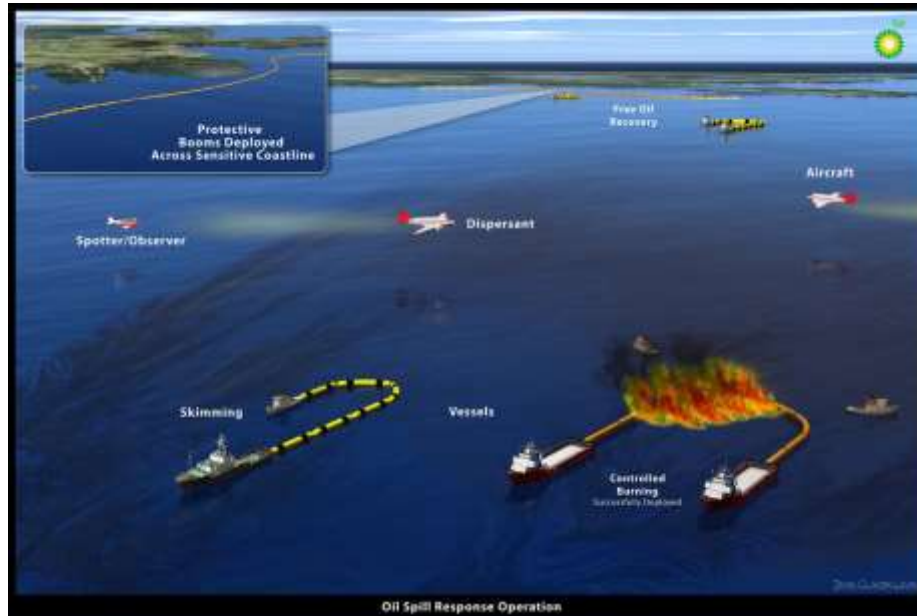
Transmission Rights of Way



- Vegetation approaching power lines
- Illegal dump sites
- Property encroachments
- Wetlands
- Inspections without disturbance of T&E species



Spill Response Management



- Aerial view of incident
- Real time data w/ FPV
- Command & control support
- Closer view
- Enhanced safety



Solar Farms

- Inspection of panels w/ IR
- Improved output from facility
- Reduced emissions at fossil plants
- Annual re-vegetation progress



Hydro Inspections



- Spill gate, tail race & concrete inspections
- Enhanced safety
- Reduced O&M costs



General Site Inspections / Surveys



- Planning
- Construction progress
- Establish baseline for comparison to current conditions
- Mapping (wetlands, landfill sites, etc.)
- Equipment condition (emission controls, expansion joint leaks)
- Security

- Tank inspections
- SPCC inspections
- Enhanced Environmental compliance
- O&M savings



Questions?

