Decommissioning Principles

Safety
Stewardship
Engagement

For more information on SONGS please visit www.SONGScommunity.com
Why is Emergency Planning Changing?

• Significantly reduced risk due to the permanent shutdown of the plant
  – No fuel in the reactors
  – Fuel has decayed greater than 3 years
  – Lower decay heat and radioactivity
  – Most potential scenarios related to an operating plant are no longer possible
  – More time to respond to and mitigate potential issues
## Accident Analysis: Operating versus Decommissioned

### Operating Reactor
- Potential accidents that dominate plant risk and create possibility of radiological releases are:
  - High Pressure Steam Line Breaks
  - Reactor Coolant System Line Breaks
  - Control Rod Ejection causing power excursion and loss of coolant
  - Loss of Steam Generator Feedwater, undercooling of the fuel

### Permanently Defueled Reactor
- Hazards are greatly reduced resulting in low probability of an accident
- Primary risk is associated with used nuclear fuel stored in the Spent Fuel Pools
- Risk is reduced:
  - Spent Fuel Pool is at atmospheric pressure and low temperature
  - Heat source is low
  - Significant mitigation time
SONGS Spent Fuel Decay Heat vs. Time

![Graph showing Spent Fuel Decay Heat vs. Time](graph.png)
Emergency Plan Changes

- Impacts only parts of original plan; much remains the same
- NRC spent 15 months reviewing and approving changes
- Opportunity for public comment during review and approval process
What Remains?

• Dedicated Emergency Response Organization
• Coordination with off-site emergency responders and the Interjurisdictional Planning Committee (IPC)
• NRC oversight
• Funding for local and county agencies at current levels through 2019 ($1.7 M annually)
• Funding for local and county agencies after 2019 commensurate with a retired nuclear plant
Permanently Defueled Emergency Plan Implementation Timeline

- Submitted EP Exemptions and License Amendment Requests (LARs) to NRC: March 31, 2014
- In-depth CEP Presentation: Emergency Planning at SONGS: October 9, 2014; status provided at all CEP meetings
- NRC Commissioners approved SONGS EP Exemptions: March 2, 2015
- SONGS Emergency Response Organization (ERO) and Offsite agencies trained: May 22, 2015
- NRC issues Safety Evaluation Reports (SERs) for EP Exemptions and LARs: June 5, 2015
- SONGS implements the NRC approved Defueled Emergency Plan: June 8, 2015
Maintaining Emergency Preparedness During Decommissioning

KELLI GALLION
EMERGENCY PLANNING MANAGER
Maintaining Emergency Preparedness During Decommissioning

• Dedicated Emergency Response Organization

• Active partner with our off-site emergency partners to protect the health and safety of the public and our employees

• Committed to funding local and regional emergency response agencies
## Maintaining Emergency Preparedness During Decommissioning

<table>
<thead>
<tr>
<th>EMERGENCY PLANNING CAPABILITY</th>
<th>OPERATING PLANT EMERGENCY PLAN</th>
<th>PERMANENTLY DEFUELED EMERGENCY PLAN (CURRENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose Assessment</td>
<td>• Onsite and Offsite radiological monitoring required</td>
<td>• Onsite radiological monitoring required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SONGS, Orange County and San Diego County continue to include offsite radiological monitoring in their Emergency Response Procedures</td>
</tr>
<tr>
<td>Emergency Notifications via 24/7 Staffed Warning Points</td>
<td>• Notified within 15 minutes</td>
<td>• Notified within 15 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verbal verification required within 60 minutes (OC, SD County, Cal OES, Camp Pendleton, and NRC)</td>
</tr>
<tr>
<td>Public Information</td>
<td>• Joint Information Center</td>
<td>• SCE Corporate Communications Department disseminates information to the public through press releases and media conferences. 24/7 Corporate Media line available</td>
</tr>
</tbody>
</table>
# Maintaining Emergency Preparedness During Decommissioning

<table>
<thead>
<tr>
<th>OFFSITE EMERGENCY RESPONSE CAPABILITY</th>
<th>OPERATING PLANT EMERGENCY PLAN</th>
<th>PERMANENTLY DEFUELED EMERGENCY PLAN (CURRENT)</th>
</tr>
</thead>
</table>
| Law Enforcement (in support of Security Related Events) | • California State Parks  
• California Highway Patrol  
• San Diego County Sheriff  
• Orange County Sheriff  
• Federal Bureau of Investigation (FBI)  
• Marine Corps Provost Marshall | • California State Parks  
• California Highway Patrol  
• San Diego County Sheriff  
• Orange County Sheriff  
• Federal Bureau of Investigation (FBI)  
• Marine Corps Provost Marshall |
| Hospitals/Medical Treatment | • Saddleback Memorial-SC  
• Mission Regional  
• Mission-Laguna Beach  
• Tri-City Medical Center- Oceanside | • Mission Hospital Regional  
• Tri-City Medical Center- Oceanside |
| Transportation of Injured Persons | • Camp Pendleton  
• Orange County Fire  
• Air Methods | • Camp Pendleton  
• Orange County Fire  
• Air Methods |
| Fire Fighting and Rescue | • Camp Pendleton | • Camp Pendleton |
Collaboration with the IPC and Our Community

• SCE shares a common goal of continued protection of the health and safety of our community and our workers. SONGS and the IPC will continue to meet on a regular basis.

• SCE has committed to maintain the Community Alert Siren System (Sirens) for the jurisdictions within 10 miles of the plant.

• SCE has committed to allowing off-site Dose Assessment Team Member(s) into the Command Center during an actual radiological event.

• SCE is committed to funding through June 2019.

• SCE has committed to discussing off-site funding for emergency preparedness beyond 2019.