

San Onofre Nuclear Generating Station (SONGS) Decommissioning Status Report

Riverside Public Utilities

Board of Public Utilities
June 12, 2017



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BACKGROUND

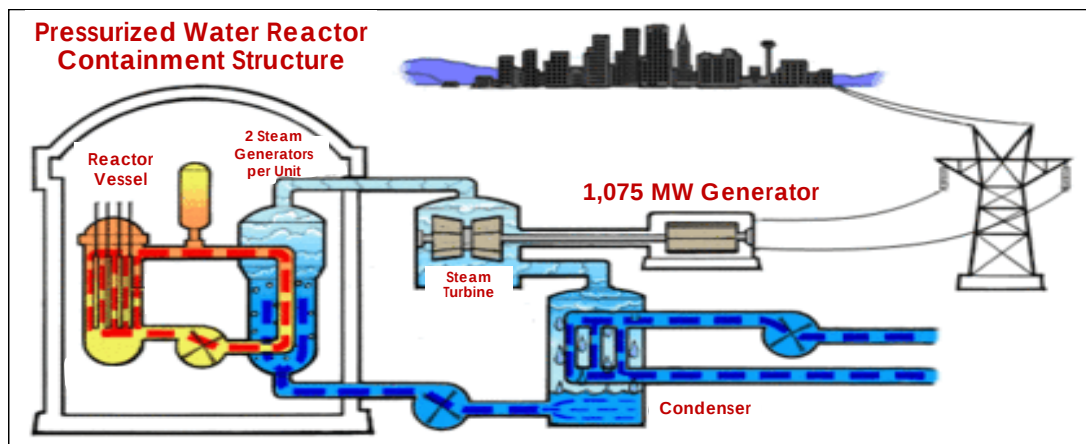
1. SONGS Participation Agreement dated November 1977.
2. Construction completed in 1981.
3. Commercial operation of Units 2 and 3 - August 1983 and April 1984 respectively.
4. Riverside's ownership share of SONGS Units 2 and 3 is 1.79% (approximately 39 MW)
5. SONGS Units 2 and 3 - 40 year operating licenses

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PRESSURIZED WATER REACTORS SONGS UNIT ANATOMY



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STEAM GENERATOR (SG) REPLACEMENT PROJECT

1. SONGS Unit 2's SGs were replaced on April 11, 2010
2. SONGS Unit 3's SGs were replaced on February 11, 2011
3. Each replaced SG is 65ft tall, 22ft in diameter and weighs 640tons.



Image courtesy of MHI

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SHUTDOWN OF SONGS UNITS 2 AND 3

1. On January 9, 2012 excessive tube wear was discovered in Unit 2's SGs
2. On January 31, 2012 excessive tube wear discovered in Unit 3's SGs.
3. On June 7, 2013 SCE announced the permanent shutdown SONGS Units 2 and 3
4. On June 12, 2013 SCE certified the permanent cessation of power operations.

SONGS DECOMMISSIONING

The decommissioning of the SONGS has 5 phases:

- Phase 1: Plant shutdown and staff reduction
- Phase 2: Spent Nuclear Fuel transfer from wet to dry on-site storage
- Phase 3: Demolition, dismantling and waste removal
- Phase 4: Site Restoration
- Phase 5: Final Disposition of on-site Spent Nuclear Fuel

SONGS DECOMMISSIONING

1. The SONGS Decommissioning Cost Estimate (DCE) is \$4.4 Billion
2. The DCE was developed by a third party consultant in 2014
3. An updated DCE will be developed before the end of this year

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RIVERSIDE'S SONGS FINANCIAL OVERVIEW

1. Riverside's DCE responsibility is approximately \$78.8 million
2. Riverside has \$79.9 million in its restricted Decommissioning Trust Fund
3. Riverside established a Designated Reserve for potential additional future unknown costs:
 - a. Annual funding is \$1.6 million
 - b. Current balance is \$6.2 million

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RIVERSIDE'S SONGS FINANCIAL OVERVIEW Cont.

4. Settlements and cost recoveries received - \$11,244,000

Description	Amount
Nuclear Electric Insurance Limited (NEIL) Settlement	\$7,160,000
Department of Energy Settlement	\$2,175,000
Southern California Edison Settlement	\$1,198,000
Mitsubishi Heavy Industries Settlement, net of attorney's fees	\$589,000
Southern California Edison audit refunds	\$122,000
Total	\$11,244,000

RIVERSIDE'S SONGS FINANCIAL OVERVIEW Cont.

5. Settlements and cost recoveries received - \$11,244,000

- Steam Generator Replacement project and other SONGS capital costs were funded in large part by bond proceeds.
- Approximately \$29 million of bond debt is still outstanding.
- Use of \$11,244,000 to partially defease existing debt produces interest savings of approximately \$7 - \$9 million.
- Cost to defease is estimated to be \$65,000, to be funded by settlements and cost recoveries.

RECOMMENDATIONS

That the Board of Public Utilities recommend that the City Council:

1. Receive and file the updates on the status of the decommissioning of SONGS;
2. Authorize the use of settlements and cost recoveries received of \$11,244,000 to partially defease existing debt;
3. Retain the various financing team members for the debt defeasance transaction, as outlined in the corresponding Board report;

RECOMMENDATIONS Cont.

That the Board of Public Utilities recommend that the City Council:

4. Authorize the City Manager, or his delegate, to execute individual agreements with each financing team member that will be negotiated closer to the actual defeasance of the bonds, for not to exceed \$65,000; and
5. Establish a bond defeasance designated reserve account within the Electric Fund, as determined by the Finance Department, and authorize the transfer of settlements and cost recoveries received of \$11,244,000 to the designated reserve for bond defeasance.