

# CLIMATE ACTION TEAM

## State Operations Working Group

### Near-Term Implementation Plan

#### Strategy 2A: State Water Project Fossil Fuel Replacement

**CAT Working Group Overview:** The primary area of responsibility for this working assignment is to report on the Department of Water Resources' move away from the specified indirect coal-based energy resources received under a 30 year contract with the Nevada Power Company (NPC). The energy is imported into California to serve the State Water Project energy needs.

**Working Group Agencies:** California Department of Water Resources.

#### Measure / Strategy

A) **Description:** Since July 1983, the Department of Water Resources (DWR) has received energy from Reid Gardner Powerplant, a coal-fired facility in Moapa, Nevada. Under the *Reid Gardner Unit 4 Participation Agreement*, DWR has ownership-like rights to 67.8 percent of Reid Gardner Unit 4 (RG4). DWR imports up to 235 MW from Unit 4 (90.4 percent of the unit's capacity).<sup>1</sup> This contract expires in July 2013. DWR notified NPC it will not renew or extend the contract. As a result, the SWP's carbon footprint will be substantially reduced by (an estimated one million metric tonnes annually) seven years earlier than the *California Global Warming Solutions Act of 2006* deadline to limit California's greenhouse gas emissions (GHG) to the equivalent of statewide GHG levels in 1990 by 2020.<sup>2</sup>

B) **Agencies Involved:** Department of Water Resources

**Plan Reference:** Federal and State legislation and policy goals aim to collectively reduce carbon emissions arising from human activity. DWR will continue improving upon its policies to promote cost-effective measures to mitigate and offset the GHG emissions associated with DWR's statewide water management directives. DWR's membership in the California Climate Action Registry (CCAR) since 2006, and its new membership in The California Registry (TCR)<sup>3</sup> provide a consistent, verifiable, and transparent reporting mechanism to communicate the details of DWR's CO<sub>2</sub> emissions footprint.

C) **Metrics:** DWR tracks and reports CO<sub>2</sub> emissions resulting from the energy generated and imported into California from RG4. The indirect CO<sub>2</sub> emissions calculations associated with this energy is based upon NPC's mandatory emissions reports<sup>4</sup> to the U.S. Environmental

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<sup>1</sup> NPC retains rights to interrupt RG4 energy deliveries to California.

<sup>2</sup> <http://www.arb.ca.gov/cc/docs/ab32text.pdf>

<sup>3</sup> The CCAR reporting has been replaced permanently by its national sister organisation, the Climate Registry (TCR). The CCAR emissions inventory will no longer accept emissions reports after 2010 (for 2009 emissions reporting).

<sup>4</sup> NPC reports emissions to the EPA CAMD on a quarterly basis, based upon direct measurements acquired through its continuous emissions monitoring (CEM) system.

Protection Agency (US EPA) Clean Air Markets Division (CAMD)<sup>5</sup> and DWR's financial settlement records. NPC reports direct measurements acquired through its continuous emissions monitoring (CEM) system to the EPA CAMD on a quarterly basis. DWR settlement records are analyzed and updated monthly. The two data streams provide precise information on the CO<sub>2</sub> emissions associated with energy imported from RG4.

With respect to forecasting, DWR has established two perspectives from which to measure the SWP portfolio's reduction in CO<sub>2</sub> emissions:

1. The first baseline is the 1990 CO<sub>2</sub> emissions from energy imported into California from NPC. The data was reported under the California Air Resources Board (CARB) inventory of the State's 1990 emissions.<sup>6</sup>
2. The second baseline is the 2007, which is the first year DWR reported and independently verified its CO<sub>2</sub> emissions inventory to the California Climate Action Registry (CCAR).<sup>7</sup>

D) Crosscutting Issues: In 2006, the Legislature passed and Governor Schwarzenegger signed AB 32, which set the 2020 GHG emissions reduction goal into law. In the spirit of this legislation, DWR notified Nevada Power that the contract for energy from Reid Gardner would not be renewed in 2013. This decision will result in an estimated one million metric tonnes of GHG emissions in California.

E) Tasks and Deliverables:

1. Description: The electric power needed to operate the SWP comes from its own and jointly developed hydroelectric facilities, long-term and short-term purchase and exchange agreements, and a 30 year agreement with the Nevada Power Company. Since July 25, 1983, DWR has received up to 235 MW from the fourth Unit at NPC's Reid Gardner coal-fired generation facility located in Moapa, Nevada. DWR notified NPC that it would not renew its agreement for coal based energy from RG4.
2. Deliverables: Upon contract expiration, DWR will replace this coal-based energy resource with cleaner, more efficient resources, and through continuing improvements to the SWP system resources and strategies. DWR reports and independently verifies its progress on emissions reductions strategies and updates its data on the annual emissions from RG4 in DWR's Annual GHG emissions inventory report to the CCAR/TCR.
3. Agency Roles: The Department of Water Resources is the lead entity on ensuring the proper legal formalities are executed in terminating its contract with NPC.

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<sup>5</sup> The EPA publishes its CAMD emissions data three months after the fact. Data can be retrieved from <http://camddataandmaps.epa.gov/gdm/index.cfm?fuseaction=emissions.wizard>

<sup>6</sup> Inventory Data Archive - 1990 to 2004; <http://www.arb.ca.gov/cc/inventory/archive/archive.htm>

<sup>7</sup> <https://www.climateregistry.org/CARROT/public/reports.aspx>

4. Timeline: Contract termination date for the RG4 contract is July 25, 2013. For the years leading up to the contract termination, various strategies are underway to replace the RG4 energy supply. The changes in the SWP power purchase portfolio indirect emissions before and after contract expiration are thus relevant to fully evaluate DWR's contribution to statewide emissions reductions goals over time.

**G) SUMMARY TABLE:**

<b>Deliverable</b>	<b>Agencies</b>	<b>Deadline</b>
<i>CCAR/TCR GHG Emissions Inventory Report</i>	Department of Water Resources	Annually: June