Comment Set A0011
Padre Dam Municipal Water District

Sch No. 2006091071
DOI Control No.
DES-07-58

PADRE DAM
Municipal Water District

FORMAL RESPONSE TO THE
SUNRISE POWERLINK PROJECT
EIR/EIS - SCHO NO. 2006091071
SUBMITTED THIS 21ST DAY OF MARCH 2008

Padre Dam Municipal Water District's ("Padre Dam") review of the Sunrise Powerlink Project found that issues regarding the San Diego Community Power Plant ("**SDCPP**") were not fully evaluated by the research for the EIR/EIS. In the review of the information provided in the EIR/EIS, Padre Dam believes that the **SDCPP** Alternative should be removed entirely from the list of the three "In-Area All Source Generation Alternatives." A0011-1

Whether or not the Sunrise Powerlink Project moves forward, the Alternative that refers to the **SDCPP** Alternative has inadequate information that might lead the reader(s) of the EIR/EIS to rely on the Alternative as being viable. At the very least, the proponents of the Sunrise Powerlink Project should be directed to re-evaluate the **SDCPP** with full research that includes input from Padre Dam, the City of Santee, and other community interests and authorities before declaring that this Alternative and location is an adequate replacement project should the proposed Powerlink Project fail.

Statements in the EIR/EIS regarding the **SDCPP** Alternative to the Sunrise Powerlink Project have questionable assumptions that need to be addressed.

One particular statement in the Executive Summary which would be totally misleading, especially to those individuals who only read the Executive Summary on page ES-32, is the Title that says "**6.2 The Alternatives Fully Evaluated in the EIR/EIS**" that says, "Each of these alternatives is evaluated within each environmental issue area of Sections D and E of this EIR/EIS." The list of alternatives includes the New In-Area All-Source Generation. They have not been 'fully evaluated." A0011-2

- The **SDCPP** (as proposed by ENPEX) has not submitted a request for potable or recycled water in order for Padre Dam to research or respond to such a request. A0011-3
- C.4.10.2 says the **SDCPP** is assumed to come online by 2008. Then in E6.1.1 the document states that the **SDCPP** "can feasibly be built by 2010." No applications have been submitted for certification to the CEC (although E.6.1.4 says the site has been under development since 2000), no water availability requests have been made to Padre Dam, and no engineering plans have been submitted for review. A0011-4

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- Future Expansion of the **SDCPP** is mentioned to potentially upgrade to 750 MW power plant without indicating what impacts such an increase might have on obvious areas such as noise and aesthetics. If the suggestion of a possible or probable expansion is made in the report, the checklist should have comments as to whether the expansion would become more significant in order to provide a true basis to the decision that the **SDCPP** is really a valid alternative to the Sunrise Project

A0011-5

- There is no mention in the EIR/EIS regarding whether the Alternatives would need separate EIR/EIS review should the Sunrise Powerlink fail to proceed or whether this EIR/EIS is considered 'fully evaluated' as mentioned in 6.2. The **SDCPP**, as discussed in this letter, has not been fully evaluated and should be eliminated from consideration as an Alternative all together.

A0011-6

- **SDCPP Major Components** discusses an existing 14-inch water main in Strathmore Road and refers to City of San Diego Municipal Water District rather than correctly to Padre Dam Municipal Water District. The section discusses that the plant connects a new 4-inch diameter pipeline to deliver 200 gallons per minute to the site. No plans or studies have been submitted or requested to Padre Dam. There has been no discussion with Padre Dam staff regarding this project to provide information as to what would be necessary to provide water, sewer, and recycled water for the plant. The expectations in this section suggest that little research was done in determining the availability and status of the existing roads, underground facilities already in place, and planned facilities that would need to be considered before making a determination.

A0011-7

- There is no evidence in the report of any research done by the preparers of the EIR/EIS regarding availability in the City of Santee roads (let alone the secured private road belonging to the Santee Lakes Recreation Preserve) to find out if the rights of way were already over-burdened with utilities and expected/approved utilities for the local development. The report does not refer to any attachments, appendices, reference materials or reports that disclose any research in this regard.

A0011-8

- Transportation and Traffic: The EIR assumes there is a public road called Santee Lakes Road providing a north/south access to the site. If the Santee Lakes Road referred to in the EIR is the road within the Santee Lakes Recreation Preserve, then the EIR has mistakenly assumed this is a public road in which they can install their water and gas lines. It is not. This is a secured private road used for the day-use Park and overnight RV campground that are fee based enterprises owned by Padre Dam and are part of the Water Recycling Facility system. No inquiries were made as to the current underground facilities in this road. Such questions would have disclosed that the road is used for the day-use Park and the overnight RV campground that are fee based enterprises owned by Padre Dam and are part of the Water Recycling Facility system. This road does not have sufficient room to provide for additional pipelines.

A0011-9

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- There is also no discussion in this section as to how the **SDCPP** would get from Fanita, west to the **SDCPP** site. There is an existing SDG&E easement that supports the existing towers. However, to alter this crossing to a road to be used daily has not been discussed and needs to be addressed in relation to the concept of overburdening the easement with respect to interference with the use of the land that the easement crosses. The easement, if being considered as the access to the site, also contains a major drainage channel and riparian habitat and crosses the Sycamore Creek which has its own special concerns for mitigation which have not been discussed. A0011-10

- **SDCPP** construction talks about onsite and offsite parking for between 240 and 350 individuals, but does not say where that parking would be located. If the construction parking impacts the Santee Lakes Recreation Preserve area, there is a large concern about security and safety as well as littering and leaks from vehicles, etc. The damage by heavy equipment to the Park area for a two year span will negatively impact the campground revenues as well as taking its toll on the path of the equipment. Padre Dam's facilities, as well as consideration for the RV campground sites, are not addressed in this section. Construction starting at 6:00 a.m. is not allowed in Santee and would not be appropriate within Padre Dam's property given the considerations as stated. A0011-11

- Impact S-5 Decrease in Property Values – this section seems to use faulty logic in stating that since MCAS Miramar will not be developing anything else, that there would be no changes to property values? This does not address the impact of the three towers and plant and administration building being proposed in the **SDCPP** and impacts to the neighborhood in the City of Santee. The negative impact would be highly significant. It would also be a highly significant impact to the value of the RV Campground that has already spent nearly $7 million to construct and improve. The value and effectiveness of the NCCP wildlife corridor would be greatly diminished by the construction and operation of the facility being proposed in **SDCPP**. A0011-12

- The document says that impacts cannot be clearly defined until project specific features and final engineering is complete. But even the general impacts to the creek, watershed, and drainage channel are not discussed even though they say the 'Impacts to jurisdictional areas are significant but mitigable to less than significant with implementation of the mitigation measures listed." If they have not been clearly defined, how can the mitigation measures listed be enough to reduce the impacts? Referring once more to ES 6.2, is it correct to say that the EIR/EIS states that the Alternatives have been fully evaluated? A0011-13

- The Sunrise Powerlink Project is an extremely large and long term project. The discussions and mitigations in the EIR/EIS seem broad-based rather than site specific. The mitigations suggested are cursory. There would be much more detail and scrutiny required if the project was only the construction of the **SDCPP** or only the construction of a shorter distance of powerlines. The scrutiny seems to be minimized, distorted or lost because of the enormity of the entire project. The requirements for site specific research should be the same for this project as they are for smaller scale projects. The mitigation for adding a permanent creek A0011-14

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crossing says that the crossing shall be perpendicular to the flow? Smaller projects seem to get more microscopic scrutiny and harsher mitigation requirements than these large, sweeping projects, even though the overall impacts in a large project such as this are significantly greater. A0011-14 cont.

FULL EVALUATION OF THE SDCPP ALTERNATIVE WOULD HAVE REVEALED:

- A need for discussion regarding the site being outside the Padre Dam service area and the possible need for annexation with LAFCO, Metropolitan Water, and the County Water Authority approvals. A0011-15

- The recycled water produced by Padre Dam is used first to provide recycled water to customers within the City of Santee and the Padre Dam service area and then, as available to customers outside the service area. This would have also disclosed the current commitments and ongoing negotiations for future commitments to the supply available. Padre Dam would need to evaluate the requirements for **SDCPP** and determine whether there is sufficient available capacity to provide the needed water for the operations on a consistent basis. A0011-16

- Visual Elements discuss the lighting issues and use of overhead hoods, etc., but does not address the visual problems of 150 foot towers and a 100 foot tall plant on a hillside that sits directly across from the new extension of the RV campground in Santee Lakes Recreation Preserve and just south of the planned wildlife corridor that is part of the mitigation for the Fanita Ranch Development. This wildlife corridor has been in design since 1998 and would have been disclosed to Enpex, or the Marine Corps or SDG&E should they have inquired as to the location or water availability. Since the development of the Water Recycling Facility in the early 1960s, the area has strived to develop the area into an aesthetically pleasing park that could be utilized by the City and the region while at the same time providing the necessary utilities of water and wastewater treatment. The visual and biological impacts of such a large complex greatly diminish 50 years of effort. The years and nearly $500,000 expended toward establishing a regional NCCP where the wildlife corridor is a keystone to Padre Dam's participation would be wasted. The goals anticipated by both the Wildlife Agencies and the NCCP partners would not be attainable with the plant located so close to the wildlife corridor. Again, not enough research was done for this alternative for the EIR/EIS. Inquiries at Padre Dam would have revealed many of these questions for discussion in the document. A0011-17

- A good indication that Padre Dam was not involved in evaluating the water supply availability for this site is the use of the term 'gray water' for the 'process water makeup requirements.' There is a distinction of levels of purity in wastewater treatment. The water that is produced from the Padre Dam facility is purified to a level to be called recycled water. Grey water is a lower level of treatment that is only allowed for irrigation purposes. Padre Dam does not produce 'gray water.' A0011-18

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IMPACTS AND MITIGATION

- Biological Resources discusses critical habitat for Willowy Monardella and California gnatcatcher and lists many other species for potential to occur. The mitigation measures shown do not adequately address these impacts. The discussion does not disclose the particularly unique makeup of Sycamore Creek or make allowances other than it will build its roads at right angles to the streambed. The discussion does not address the issue that the site eliminates a watershed that feeds Sycamore Creek and impacts Sycamore Creek with the road crossing that is suggested in the previous sections. A0011-19

- Impact B-5 discusses the sensitive species that could not be reduced to less than significant. If there had been input requested by the proponent to Padre Dam, there should also have been a discussion of the impact to the NCCP wildlife corridor. A0011-20

- Violation of the Migratory Bird Act would be significant during construction and even have a negative impact after construction. The EIR says this is considered mitigable to less than significant by the EIR/EIS document. Since part of the goal of the Joint Water Agencies' NCCP is to increase the number of nesting birds - especially threatened or endangered, but also general bird populations, this project reduces the success of the goals for the NCCP and the Lakes in general. A0011-21

GENERAL QUESTION AND ISSUE

- Where is the discussion of use of re-circulating water in the cooling towers in respect to the connection to Legionnaires disease and using both potable and recycled water for this purpose? A0011-22

Padre Dam appreciates the opportunity to respond to such a large and important project for the region. As was discussed above, all of our concerns are related to the **SDCPP** alternative. Given the impacts that were overlooked in the EIR/EIS and the significant negative impact on the local area, we believe that this option should be eliminated from the In-Area All Source Generation Alternatives provision.

If you have any questions or need additional information, please contact our Right of Way and Environmental Resource Agent, Mary Lindquist, at (619) 258-4651.

PADRE DAM MUNICIPAL WATER DISTRICT

Douglas S. Wilson
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Responses to Comment Set A0011
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A0011-1 A comprehensive analysis and assessment of impacts and mitigation measures for the San Diego Community Power Plant (ENPEX) project is found in Section E.6 in Volume 5 of the Draft EIR/EIS. This section is divided into main sections for each of 15 environmental issue areas (e.g., Air Quality, Biological Resources) that contain the environmental settings and impacts of the proposed ENPEX project and other alternatives representative of reasonable generation scenarios.

ENPEX is considered in the EIR/EIS as representative of a reasonable generation scenario and as stated in Section E.6 in Volume 5 of the Draft EIR/EIS it is not intended to depend on the progress of contracts for individual utility projects.

A0011-2 Please see Response A0011-1 regarding the full analysis of the ENPEX project.

A0011-3 The commenter suggests that ENPEX has not submitted a request for potable or recycled water to the Padre Dam Municipal Water District (MWD). As stated above, ENPEX is analyzed as representative of a reasonable generation scenario. A request for potable or recycled water would be presented to the City of San Diego Water Department or the Padre Dam Municipal Water District prior to or during the process of completing the Application for Certification for the proposed ENPEX project.

A0011-4 The Draft EIR/EIS looked at various early planning documents for the ENPEX project that gave a variety of online dates for the proposed power plant. Neither an online date of 2008 nor an online date of 2010 is feasible at this time. The CPUC Phase I hearings are determining the timing of the need for the Proposed Project. SDG&E acknowledged in their Phase II testimony that the Proposed Project would not be online until 2011. Additionally, all generation resources are not needed at the same time. The online dates for the multiple all-source generation components could be staggered thereby giving the ENPEX project, or any other representative generation project, time to go through the permitting process.

A0011-5 ENPEX, as described in Section E.6.1.4 in Volume 5 of the Draft EIR/EIS, would be a nominal 750 MW gas-fired combined cycle power plant and was analyzed as such. While the actual capacity built by ENPEX may be 500 MW with possible additional capacity to be installed in the future as the need for power increases, the analysis of the ENPEX project assumed a 750 MW power plant.

A0011-6 The commenter is correct in noting that the ENPEX project, along with the other representative generation facilities, would require a separate CEQA analysis. Due to its location on federal land (MCAS Miramar), NEPA analysis would be required as well. The following sentence has been added to Section C.4.10 (Non-Wires Alternatives) in Volume 1 of the Draft EIR/EIS, Section E.6 (New In-Area All-Source Generation Alternative) in Volume 5 of the Draft EIR/EIS, and Section 4.10 in Appendix 1 (Alternatives Screening Report) in Volume 6 of the Draft EIR/EIS.

> Including the components of the non-wires alternatives in the Sunrise Powerlink EIR/EIS does not automatically lead these alternatives to be built because additional approvals or agency actions would be necessary to implement them. Each

generator included in the non-wires scenarios would require permitting and CEQA and/or NEPA compliance for each project.

A0011-7 The water required for the proposed ENPEX project could come from either the City of San Diego Water Department or the Padre Dam Municipal Water District depending on availability and infrastructure constraints. The details of design and construction of the proposed ENPEX project and the water requirements would be presented in the Application for Certification, including the fine turning of impacts and mitigation measures.

A0011-8 Underground utility interconnections within existing roadways/public right-of-way (ROW) would be required for natural gas and water supply associated with the SDCPP project. As discussed in Section E.6.1.4, to access natural gas, SDCPP would tie into a SDG&E existing 20-inch line along Mast Blvd, near where the SDG&E's existing 36-inch pipeline terminates in Santee. One proposed route was suggested in the Draft EIR/EIS, however, a route would be finalized during permitting and environmental compliance should this alternative component be approved.

Likewise, it is expected that the water line would be buried within the same ROW as the natural gas pipeline route, beneath or along existing and new roads to minimize impact on surrounding land. Recycled water would also be used from the neighboring wastewater treatment plant to meet all process water makeup requirements based on an air-cooled plant. An alternative source of recycled water would be from the Padre Dam Municipal Water District in Santee. The pipeline location for recycled water has not been identified. These routes would also be determined during permitting and environmental compliance should this alternative component be approved and they would be located in roadways where there would be adequate room.

In addition, implementation of Mitigation Measure S-2b under Impact S-2 (Construction would disrupt the existing utility systems or cause a collocation accident) would ensure that underground utilities would be protected during construction of any new linear utilities associated with SDCPP.

A0011-9 The discussion in Section E.6.9 New In-Area All-Source Generation makes reference to Fanita Parkway and Santee Lakes Boulevard. Based on Thomas Guide 2008 Street Guide for San Diego County, Fanita Parkway becomes Santee Lakes Boulevard north of Ganley Road. While the discussion does not specify whether the roads are public or private, the discussion does state that the roads would be potentially impacted during construction and that gas pipelines may be placed within the roadway. Mitigation Measures T-1a Restrict land closures, T-1b Prepare detour plans, and T-1c Obtain required permits were identified to reduce impacts. ENPEX would be required to obtain construction/ encroachment permits from the City of Santee, which would address concerns regarding the use of a private road and current underground facilities in the roadway.

A0011-10 The details of design and construction of the proposed ENPEX project and the required easement to enter and exit the ENPEX property would be presented in the Application for Certification, including the fine turning of impacts and mitigation measures.

A0011-11 The commenter expresses concerns over the impacts of construction parking on the Santee Lakes Recreation Preserve, including security and safety. In addition, possible damage from heavy equipment is of concern, as is a possible loss of revenue and adverse affects on recreational users of the preserve.

The locations of construction worker parking and equipment staging would be evaluated in the EIR or EIR-equivalent that must be prepared for the SDCPP project. The location and configuration of parking, the use of shuttles and carpooling, and other such information and impacts relative to parking, road damage, contamination, and campground revenues would be examined in that EIR and appropriate mitigation would be developed.

A0011-12 In addition to the discussion under Impact S-5 (Presence of the project would decrease property values) in Section D.14.5.1 in the Draft EIR/EIS, please refer to General Response GR-12 for a discussion of why impacts to property values from industrial facilities are considered to be less than significant (Class III). To clarify the issue, the following text has been added to Section E.6.14 under Impact S-5 (Presence of the project would decrease property values):

> The discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines and power plants in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to ~~Therefore, impacts would~~ be less than significant (Class III).

Please refer to Responses A0025-7 and A0025-11 for a discussion of the RV campground and the NCCP wildlife corridor.

A0011-13 The impacts and mitigation measures addressed in Section E.6 in Volume 5 of the Draft EIR/EIS are for a project that is representative of a reasonable generation scenario. The fine tuning of the impacts and mitigation measures would occur in the analysis of the Application for Certification of the proposed ENPEX project.

A0011-14 Please see Responses A0011-6, A0011-10, and A0011-13 regarding impact analysis and mitigation measures for the proposed ENPEX project.

A0011-15 Please see Response A0011-6 regarding additional approvals and agency actions required to implement the proposed ENPEX project.

A0011-16 Please see Response A0011-7 regarding the water requirements of the proposed ENPEX project.

A0011-17 One Key Viewpoint (KVP 74 located at the north end of Strathmore Drive) was selected for the detailed analysis of the SDCPP Project. The impact analysis for KVP 74 concluded that the visual impact resulting from the plant and ancillary facilities (interconnecting transmission line and access road) would cause significant and unmitigable (Class I) visual impacts. Although this viewpoint was not located in the Santee Lakes Recreation Preserve, the impact analysis is considered applicable to views of the SDCPP facility from the camping/RV area at the north end of the Recreation Preserve (see last sentence of first paragraph on page E.6-83 of the Draft EIR/EIS).

A0011-18 The commenter suggests that the Padre Dam MWD does not produce “grey water,” but rather “recycled water” at a higher level of purity than “gray water,” which is allowed

only for irrigation. Section E.6.1.4 in Volume 5 of the Draft EIR/EIS has been changed to say:

- **Water Supply.** SDCPP would use water for HRSG boiler makeup, CTG evaporative cooler makeup, water treatment regeneration, HRSG blowdown quench, service/ domestic, and miscellaneous plant uses. It is expected that the water line would be buried within the same ROW as the natural gas pipeline route, beneath or along existing and new roads to minimize impact on surrounding land. Recycled ~~Gray~~ water would also be used from the neighboring wastewater treatment plant to meet all process water makeup requirements based on an air-cooled plant. An alternative source of recycled ~~gray~~ water would be from the Padre Dam Municipal Water District in Santee. The pipeline location for recycled ~~gray~~ water has not been identified. The average water use would be approximately 117,360 gpd or 82 gpm.

A0011-19 The commenter states the mitigation measures do not adequately address impacts to willowy monardella, coastal California gnatcatcher, and other sensitive species with potential to occur. Impacts B-5 and B-7 address impacts to special status plant and animal species with potential to occur onsite and the recommended mitigation measures on pages E.6-52 and E.6-54 of the Draft EIR/EIS adequately address the impacts to these species. The Draft EIR/EIS incorrectly stated that critical habitat for willowy monardella and coastal California gnatcatcher occurred on the site (an internal mapping error resulted in a one-mile buffer to the SDCPP site). Critical habitat for willowy monardella and coastal California gnatcatcher does not occur on the SDCPP site, but does occur within the one-mile buffer to the SDCPP site. Page E.6-48 of the Draft EIR/EIS has been corrected as follows:

> **Designated Critical Habitat**. The SDCPP would not be located on ~~cross~~ designated critical habitat ~~for willowy monardella and coastal California gnatcatcher.~~

The commenter also states concerns regarding potential impacts to Sycamore Creek. The Draft EIR/EIS analyzed the potential impacts of the SDCPP at a programmatic level because the SDCPP's development status is unclear. The document provided a discussion of the biological impacts analyzed for the Proposed Project and other alternatives, including impacts to jurisdictional waters and wetlands. Elimination of a watershed that feeds Sycamore Creek is not certain because project siting has not been finalized. Potential impacts to Sycamore Creek due to access road construction were addressed on page E.6-50 of the Draft EIR/EIS as follows:

> Impacts to jurisdictional waters could occur from vegetation removal, erosion, sedimentation, and/or degradation of water quality during construction, and the placement of access roads.

A0011-20 The commenter indicated that the document should have included a discussion of potential impacts to the NCCP wildlife corridor. See Response to Comment A0025-7.

A0011-21 The commenter states that violation of the MBTA would be significant during construction and have a negative effect after construction. Violation of the MBTA would occur and would be considered a significant impact if the project resulted in the killing of migratory birds or cause destruction or abandonment of migratory bird nests and/or eggs. The mitigation measures included for this potential impact (Mitigation Measures for Impact B-8 on page E.6-55 of the Draft EIR/EIS) would reduce the level of the impact to less than significant. It is acknowledged that construction on 60 acres would permanently

remove habitat for nesting birds, but Mitigation Measure B-1a requires those vegetation impacts to be mitigated offsite through habitat restoration or preservation of lands.

A0011-22 The commenter questions why the Draft EIR/EIS did not evaluate the risks of Legionnaires' disease. The fifth paragraph under Impact P-9 of Section E.6.10 of the Draft EIR/EIS has been modified as follows:

> In addition, Legionnaires' Disease Bacteria (LDB) can be a public health threat caused by the aerosolization of water from cooling towers if the cooling towers are not properly maintained and operated. Legionnaires' disease is a pneumonia, which attacks 2 to 5 percent of those exposed. Between 5 and 15 percent of those infected die from the disease. Outbreaks of the disease have been attributed to contaminated aerosols from cooling towers or evaporative condensers (Gagliardo et al., 2005). An outbreak of the disease as a result of operation of cooling towers would be considered a significant impact (Class II).
>
> Currently there are no uniform guidelines, rules or regulations regarding Legionella in the United States. Various state departments of heath have published guidelines for reporting confirmed cases to the Center for Disease Control and performing potential source investigations. The U.S. Department of Labor Occupational Safety and Health Administration (OSHA) has published recommended guidelines for control of LDB, which have been incorporated into Mitigation Measure P-8c (OSHA, 2008).[1] To minimize the threat of LDB from cooling towers to a less than significant level through system design to allow for easy access for cleaning of internal parts, periodic cleaning and maintenance, and use of biocides, Mitigation Measure P-8c, Control growth of Legionnaires' Disease Bacteria, is recommended.

In addition, Mitigation Measure P-8c has been added to Section E.6.10 as follows:

> **P-8c Control growth of Legionnaires' Disease Bacteria (LDB).** The Applicant shall incorporate the following system design features recommended by the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) for control of LDB:
>
> - Ensure enclosure of the system to prevent drift of water vapor.
> - Include design features that minimize the spray generated by the cooling system.
> - Operate with low sump-water temperatures.
> - Equip each sump with a "bleed," and make-up water shall be supplied to reduce the concentration of dissolved solids.
> - Install high-efficiency drift eliminators for all cooling towers, which will reduce water loss and potential for exposure.
>
> During operation, the Applicant shall properly monitor and maintain the cooling system according to manufacturers' recommendations to prevent buildup of scale, sediment, and bio-fouling. The Applicant shall perform

[1] OSHA (U.S. Department of Labor Occupational Safety and Health Administration). 2008. Legionnaires' Disease Source and Control: Section II:A. Cooling Towers, Evaporative Condensers, and Fluid Coolers. Online at http://www.osha.gov/dts/osta/otm/legionnaires/cool_evap.htm. Accessed on August 6.

monthly visual inspection and periodic maintenance of the system to control growth of LDB and related organisms, as suggested by the following OSHA recommended guidelines.

- Clean and disinfect cooling towers quarterly or at least twice a year if the unit is not used year-round. This shall be completed before initial start-up at the beginning of the cooling season and after shutdown in the fall.
- Systems with heavy bio-fouling or high levels (>100 colony forming units per milliliter, CFU/mL) of LDB shall require additional cleaning.
- Any system that has been out of service for an extended period shall be cleaned and disinfected.
- New systems shall require cleaning and disinfecting, because construction material residue can contribute to LDB growth.
- Monthly microbiologic analysis shall be required to ensure control of biological contamination.

In addition, the Applicant shall ensure the systematic use of system-appropriate biocides to control the growth of LDB. Monitoring of LDB shall be carried out for the life of the project to ensure public safety. If any LDB is noted in the testing, the appropriate decontamination and treatment measures shall be employed to clean the cooling towers and associated cooling water.

The Applicant shall be responsible to document operations and maintenance, listing dates of inspections and cleanings, water-quality test results, LDB outbreak investigations, and maintenance. The Applicant shall also maintain an up-to-date description of the operating system (which includes all components cooled by the system) and details of the make-up water to the system. The written procedures for proper operation and maintenance of the system shall indicate the use of scale and corrosion inhibitors and antifoaming agents. Written records of systematic biocide or chlorine use shall be readily available upon request.