



CDM Executive Board  
UNFCCC Secretariat  
Martin Luther King Strasse 8  
P.O. Box 260124  
D-53153  
Germany

3 August 2011

**Subject: Review of the Additionality of CDM Project 4807: *Energy Efficient Power Generation by Nabha Power Limited, India***

Dear Mr. Hession,

We welcome the decision by the Executive Board to review the request for registration of Project 4807: *Energy Efficient Power Generation by Nabha Power Limited, India*, to determine whether it complies with the CDM's additionality requirements. We respectfully request the transmission of the present letter to the responsible Secretariat and RIT Team members.

We have serious concerns about this project, and believe that it is so plainly non-additional under CDM rules that its registration would seriously undermine the credibility of the CDM process. Quite simply, this project will use supercritical technology, regardless of whether the CDM provides support. If registered, this Project could receive 9,364,517 CERs that do not represent additional emissions reductions, and could give the project participant an undeserved windfall on the order of € 93 million (based on current CER prices).

In light of the Executive Board's instructions to review the additionality of this project in accordance with paragraphs 43 to 52 of the CDM modalities and procedures, we respectfully request that the Secretariat and the Registration and Issuance Team (RIT) explicitly consider the issues set out below. In particular, we request the Secretariat and the RIT to closely scrutinize the cost assumptions underlying the claim for additionality, as there is reason for concern that they are the product of a collusive arrangement between the project owner and its EPC contractor, the project owner's parent company, and may not be legitimate. (section 3).

1. CDM support will not catalyze additional emissions reductions because the Punjab State Electricity Board has required this project to use supercritical technology.



2. Nabha Power does not need CDM support to proceed using supercritical technology, as it has already secured all of its financing, and is well under way. The Executive Board has previously refused to register an Indian supercritical plant on these grounds.
3. The *Validation Report* used an unreasonably high estimate of the project costs, and unreasonably low estimate of project costs for the subcritical alternative. Because most of the extremely high project cost assumptions are attributable to a contract between the owner of Nabha Power and its parent company, the Secretariat and RIT should investigate whether these estimates are legitimate.
4. Nabha Power should have evaluated other “realistic and credible” baseline scenarios.
5. Supercritical technology has become the standard for new large-scale coal plants in India, and is therefore is a more appropriate baseline than subcritical technology.
6. The *Validation Report* failed to apply the E+ guidelines to determine the baseline.
7. The *Validation Report* used an unreasonably high estimate of project costs for the natural gas alternative.
8. The sensitivity analysis improperly advantages inefficient subcritical technology by using an unrealistically narrow range of fuel price variation.

## **DISCUSSION**

**1. CDM support will not catalyze additional emissions reductions because the Punjab State Electricity Board has required this project to use supercritical technology.** A project cannot be additional if it is “the only alternative amongst the ones considered by the project participants that is in compliance with mandatory regulations...”<sup>1</sup> Here, the Punjab State Electricity Board’s (PSEB) bidding process required “all bidders to bid *for a supercritical project* capable of having a saleable power capacity...of 1,200±10% MW”.<sup>2</sup> (emphasis added). This requirement was reiterated in the Power Purchase Agreement (PPA) between Nabha Power and PSEB, which specifies that units of the power station are to be “based on Supercritical Technology.”<sup>3</sup> This stipulation is *not* contingent upon the receipt of CDM credits.<sup>4</sup> Given that the

---

<sup>1</sup> *Tool for the demonstration and assessment of additionality, Ver. 5.2, Annex: Guidance on the Assessment of Investment Analysis*, at 5.

<sup>2</sup> *PDD*, at 38.

<sup>3</sup> [http://www.pspcl.in/docs/pdf/ppa\\_18.pdf](http://www.pspcl.in/docs/pdf/ppa_18.pdf) at 21

<sup>4</sup> *Id.*



State Electricity Board has mandated the use of supercritical technology as both a condition of bid eligibility and a matter of contractual obligation, the use of that technology cannot be said to generate additional emissions reductions under CDM rules.

**2. Nabha Power does not need CDM support to proceed using supercritical technology, as it has already secured all of its financing, and is well under way. The Executive Board has previously refused to register an Indian supercritical plant on these grounds.** Nabha Power has already secured all the necessary financing to proceed with the project activity,<sup>5</sup> and makes no claim that this financing is contingent upon receiving CDM support.<sup>6</sup> As such, it cannot show that the CDM support is essential for the project to move forward using supercritical technology.<sup>7</sup> The Executive Board has already refused to register another Indian supercritical project in very similar circumstances. In its review of the “*GHG Emission Reductions through grid connected high efficiency power generation (3020)*,” the Executive Board concluded that the project participant and the DOE had failed to substantiate barriers to investment in the project, because the project participant had secured financing after the project start date, but did not “clearly indicate that the lenders have taken into account the CDM registration of the project activity.”<sup>8</sup> The same rule should apply here.

Moreover, implementation of the project with supercritical technology is already well under way. In January-March of 2011 Nabha Power ordered the construction of a 13 km dedicated rail link,<sup>9</sup> acquired 84 percent of the required land,<sup>10</sup> and contracted for the supercritical boilers for the Project.<sup>11</sup> By taking these actions in advance of validation or registration, Nabha Power has shown that it does not actually need CDM support to proceed.

---

<sup>5</sup> Credit Analysis and Research Limited. Nabha Power Limited . 2011. available at <http://www.careratings.com/scripts/TransactionForm1.aspx?docid=2945&DINID=> ; Validation Report, at 89.

<sup>6</sup> *Id.*; see also <http://www.infraline.com/power/State/Punjab/NabhaPseb.aspx>

<sup>7</sup> See, *Review of Project Activity: Hot air generation using renewable biomass fuel for spray drying application at H. & R. Johnson (India) Ltd, Kunigal (1545)*, available at <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1200568517.44/Rejection/DYSTHYWLL9HIB9ELS1BBWMTPUZIEPE> (project proponent must show that the benefits of the CDM were a “necessary element” of the decision to invest in order to prove additionality).

<sup>8</sup> *Review of Project Activity: GHG Emission Reductions through grid connected high efficiency power generation (3020)*, available at <http://cdm.unfccc.int/Projects/DB/DNV-CUK1254830678.73/Rejection/IWNNWJIB1G6WAG6F9RW59N3AOLQEXP>

<sup>9</sup> Press Release. Larsen and Toubro Limited. January 3, 2011. <http://www.lntecc.com/homepage/p93.htm>

<sup>10</sup> Credit Analysis and Research Limited. Nabha Power Limited . 2011. <http://www.careratings.com/scripts/TransactionForm1.aspx?docid=2945&DINID=>

<sup>11</sup> Construction Update. March 2011.

<http://www.constructionupdate.com/News.aspx?nId=VQUXmgTxUGB5zlw2fwZRg==&NewsType=Mitsubishi-Heavy-Industries-bags-two-orders-for-core-power-components-India-Sector>



**3. The *Validation Report* used an unreasonably high estimate of the project cost, and unreasonably low estimate of project costs for the subcritical alternative. Because most of the extremely high project cost assumptions are attributable to a contract between the owner of Nabha Power and its parent company, the Secretariat and RIT should investigate whether these estimates are legitimate.** Most credible studies show that the capital costs of a new supercritical coal fired power plant are about equal to the capital costs of a subcritical one, and deliver energy at the same or lower costs over their operating life due to their reduced fuel costs.<sup>12</sup> However, the *Validation Report* contends that the supercritical project activity will cost almost *twice* as much as the subcritical alternative.<sup>13</sup>

There is no basis for such an enormous cost differential in the relevant literature or experience. The assumed capital cost of the project--95,000 million INR (1,042 €/kw)-- is far higher than what would be expected from the literature,<sup>14</sup> and 38 percent higher than average of the supercritical project costs published on UNFCCC website-- 68,800 million INR (755 €/Kw). If this figure is substituted in the investment analysis, the IRR for the project is 15.12 percent without CDM support, which would show that Nabha Power does not need CDM support to be economically viable. Conversely, the *Validation Report* assumes that the subcritical project alternative will cost 40,223 million INR (€529/Kw),<sup>15</sup> which is substantially lower than the 70,000-75,000 million INR (€ 827/Kw) suggested by the literature.

The Secretariat and RIT should closely scrutinize whether Nabha Power's inordinately high cost assumptions were generated in good faith. Most of these costs are attributable to a contract between LT Power, the owner of Nabha Power, and its EPC Contractor, Larsen & Toubro Ltd., the parent company of LT Power.<sup>16</sup> The DOE originally found that the cost of the supercritical project was much higher than the published literature and "not acceptable."<sup>17</sup> However, the DOE ultimately accepted the estimate on the basis of the contract between LT Power and its parent, and never questioned whether that agreement was appropriate.<sup>18</sup> Given that the costs in the

---

<sup>12</sup> MIT, 2007. *The Future of Coal*, at 19; Center for Science and Environment, 2010. *The Challenge of the New Balance*, at 35.

<sup>13</sup> *Validation Report* at 37.

<sup>14</sup> See, U.S. Environmental Protection Agency, 2010. *Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Coal Fired Power Plants, Exhibit 3-2*, available at <http://www.epa.gov/nsr/ghgdocs/electricgeneration.pdf>; see also <http://www.deq.state.mi.us/aps/downloads/permits/PubNotice/341-07/AlternativesAnalysis.pdf> ; National Energy Technology Laboratory, U.S. Department of Energy, 2010. *Cost and Performance Baseline for Fossil Energy Plants; Volume 1. Bituminous Coal and Natural Gas to Electricity*, Rev. 2, ES-5, ES-7 [http://www.netl.doe.gov/energy-analyses/pubs/BitBase\\_FinRep\\_Rev2.pdf](http://www.netl.doe.gov/energy-analyses/pubs/BitBase_FinRep_Rev2.pdf)

<sup>15</sup> *Validation Report*, at 38.

<sup>16</sup> *Id.*, at 87.

<sup>17</sup> *Id.*, at 36.

<sup>18</sup> *Id.*, at 38.

contract were unusually high, and that the parties to the contract did not have an arm's length relationship, the Secretariat and RIT should investigate this matter to determine if there was any collusion or manipulation of the CDM process.

**4. Nabha Power should have fully evaluated other “realistic and credible” baseline scenarios.** First, the *Validation Report* failed to consider energy efficiency and other demand side management approaches as potential alternatives to the project. The Government of India has concluded that these options should be considered on par with expanded supply in delivering energy services. It has recognized that “lowering energy intensity through higher efficiency is equivalent to creating a virtual source of untapped domestic energy...[a] unit of energy saved by a user is greater than a unit produced, as it saves on production losses as well as transport, transmission and distribution losses.”<sup>19</sup> Accordingly, the Planning Commission found that “[s]everal [energy efficiency] options are less expensive than coal or gas-based generation, and therefore, *should be the “first resource” considered for fulfilling demand.*”<sup>20</sup> (emphasis added). Recent studies have concluded that end-use efficiency improvements could eliminate the supply deficit by 2013,<sup>21</sup> reduce effective demand by over 20 percent,<sup>22</sup> add approximately \$500 billion to India’s economy by 2017,<sup>23</sup> and reduce the India’s cumulative CO<sub>2</sub> emissions by 65 Mt.<sup>24</sup> Thus, “efficiency power plants”-- i.e., bundled sets of energy efficiency programs that can deliver the energy and capacity equivalent of a large conventional power plant-- should have been considered on the same basis as supply alternatives in the baseline scenario analysis.<sup>25</sup>

Second, the *Validation Report* entirely omits any analysis of the potential for improvements in transmission and distribution efficiency, despite the fact that Punjab suffers from loss rates of 17 percent.<sup>26</sup> Reducing transmission and distribution losses offers enormous opportunities to

---

<sup>19</sup> Planning Commission, 2006. *Integrated Energy Policy: Report of the Expert Committee*, at xx.

<sup>20</sup> Planning Commission, 2011. *Interim Report of the Expert Group on Low-Carbon Strategies for Inclusive Growth*, at 31.

<sup>21</sup> Jayant Sathaye and Arjun P. Gupta, 2010. *Electricity Deficit through Energy Efficiency in India: An Evaluation of Aggregate Economic and Carbon Benefits* (Lawrence Berkeley National Laboratory).

<sup>22</sup> Greenpeace India. 2009. *Still Waiting*, at 14. available at <http://www.greenpeace.org/india/Global/india/report/2009/11/stillwaiting.pdf>

<sup>23</sup> Shakti Foundation, 2011. *The Hundred Billion Dollar Bonus: Global Energy Efficiency Lessons from India*.

<sup>24</sup> Jayant Sathaye and Arjun P. Gupta, 2010. *Electricity Deficit through Energy Efficiency in India: An Evaluation of Aggregate Economic and Carbon Benefits* (Lawrence Berkeley National Laboratory).

<sup>25</sup> See, e.g., the World Bank’s recent support for mass distribution of compact fluorescent light bulbs in Bangladesh. [http://siteresources.worldbank.org/EXTENERGY2/Resources/ELIB\\_Presentation.pdf](http://siteresources.worldbank.org/EXTENERGY2/Resources/ELIB_Presentation.pdf). Meg Gottstein, 2008.

*Planning, Financing and Building Efficiency Power Plants: Regulatory Practices in California and Other States*, available at [www.raponline.org](http://www.raponline.org); David Moskovits, 2005. *Meeting China’s Energy Efficiency Goals Means China Needs to Start Building Efficiency Power Plants (EPP)*, available at [www.raponline.org](http://www.raponline.org).

<sup>26</sup> Ahuja, Charanjit. *PSEB Unbundling helps Punjab cut T&D Losses*. April 21, 2011. <http://www.financialexpress.com/news/pseb-unbundling-helps-punjab-cut-t&d-losses/779038/>



displace the need for new supply, and is a top government priority.<sup>27</sup> Simply raising Indian transmission and distribution efficiencies to international best practices (less than 10 percent)<sup>28</sup> could eliminate the need for as much as 30 GW worth of additional capacity.<sup>29</sup>

Third, the *Validation Report* also overlooks solar thermal power, which is baseload power and could deliver 3 to 4 times the power of India's coal reserves.<sup>30</sup> The Government has identified capturing the “low hanging options” in solar thermal as a national priority in the first phase of its national solar mission.<sup>31</sup> As fuel and construction costs of coal-fired power plants have rapidly escalated, the price difference between coal and solar thermal has dramatically narrowed.<sup>32</sup>

In accordance with the *Additionality Tool*, the project proponent should have assessed these alternatives alone and in combinations other renewable alternatives such as wind and photovoltaic that could reduce or eliminate the need for additional coal-fired plants.<sup>33</sup> Yet the *Validation Report* makes no effort to assess how these alternatives could be combined in ways that would produce a lower cost or lower emitting baseline than subcritical technology.

**5. Supercritical technology has become the standard for new large-scale coal plants in India, and therefore is a more appropriate baseline than subcritical technology.** Since the partial deregulation of the power sector in 2003, the private sector has only invested in 1,120 MW of subcritical coal generation in all of India.<sup>34</sup> By contrast, as of 2010, India had 37 supercritical units between 660 MW and 800 MW under construction, with a combined generating capacity of 26 GW.<sup>35</sup> At least two units have come online in the last 6 months, and at least 8 more with a capacity of 5280 MW are slated to begin operations in the next year.<sup>36</sup>

---

<sup>27</sup> International Energy Agency; *Technology Development Prospects for the Indian Power Sector*, at 69. available at [http://www.iea.org/papers/2011/technology\\_development\\_india.pdf](http://www.iea.org/papers/2011/technology_development_india.pdf)

<sup>28</sup> Greenpeace India. 2009. *Still Waiting*, at 14. available at <http://www.greenpeace.org/india/Global/india/report/2009/11/stillwaiting.pdf>

<sup>29</sup> Shankar Sharma, 2011. *Indian Power Scenario: Huge scope for low carbon energy pathway*.

<sup>30</sup> Ummel, Kevin. Center for Global Development Working Paper. *Concentrating Solar Power in China and India: A Spatial Analysis of Technical Potential and the Cost of Deployment*.

<sup>31</sup> Jawaharlal Nehru National Solar Mission: Towards Building SOLAR INDIA, at 3, available at <http://india.gov.in/allimpfrms/alldocs/15657.pdf>.

<sup>32</sup> David Wheeler, 2008. *Tata Ultra Mega Mistake: The IFC Should Not Get Burned by Coal*, available at <http://blogs.cgdev.org/globaldevelopment/2008/03/tata-ultra-mega-mistake-the-ifc.php>

<sup>33</sup> *Additionality Tool*, at 4.

<sup>34</sup> Det Norske Veritas, 2010. *Response to request for review “GHG Emission Reductions through grid connected high efficiency power generation”*, at 12-13.

<sup>35</sup> International Energy Agency, 2011: *Technology Development Prospects for the Indian Power Sector*, at 46. available at [http://www.iea.org/papers/2011/technology\\_development\\_india.pdf](http://www.iea.org/papers/2011/technology_development_india.pdf)

<sup>36</sup> “Media Release: Adani Power Synchronizes Country’s First supercritical 660 MW unit at Mundra”, December 23, 2010, available at <http://www.adanipower.com/Data/APLMediaReleasefirst660Unit.pdf>; “Barh 1 and II, 3,300MW

Around 15 others are in the planning stage.<sup>37</sup> The Government of India has mandated the use of supercritical technology for the “ultra-mega power projects” (UMPPs), a series of projects that each have a minimum capacity of 4 GW, and the Government of Madhya Pradesh has required the use of supercritical or ultra-super critical technology for all projects over 660 MW. Going forward, about 60 percent of the 75 GW of thermal power contemplated in the 12<sup>th</sup> Five-Year Plan is expected to be supercritical,<sup>38</sup> as well as 100 percent of new coal-fired plants in the 13<sup>th</sup> Five-Year Plan.<sup>39</sup> Supercritical units are likely to contribute up to 50 GW by 2020.<sup>40</sup>

Supercritical units will continue to gain market share without CDM support. Inherent operational advantages, government policies, and rising coal prices and severe domestic coal shortages all provide a strong incentive for operators to install more efficient technology.<sup>41</sup>

**6. The Validation Report failed to apply the E+ guidelines to determine the baseline.** E+ guidelines require that policies that give comparative advantage to more emissions intensive technologies or fuels can only be accounted for in establishing the baseline to the extent that they existed prior to the adoption of the Kyoto Protocol. Where such policies are in place, the baseline scenario must refer to a hypothetical situation without the policies or regulations.<sup>42</sup> Coal for this project will be supplied by a subsidiary of Coal India,<sup>43</sup> a state-owned enterprise that has long subsidized the consumption of coal by selling it to power producers at below market rates.<sup>44</sup> This subsidy has dramatically increased since December 11, 1997. This subsidy--the difference between the prices charged by these state-owned enterprises and prevailing international market prices--gives a competitive advantage to coal-fired plants over cleaner sources of energy production, and to inefficient coal plants over more efficient ones. Accordingly, under the E+ guidelines, potential baseline scenarios should have been evaluated as if the December 11, 1997

---

Coal-Powered Plant Barh, India,” <http://www.power-technology.com/projects/barh-coal/>; “NTPC’s first supercritical tech unit commissioned,” *iGovernment*, February 24, 2011, available at <http://www.igovernment.in/site/ntpc%E2%80%98s-first-supercritical-tech-unit-commissioned-39347>

<sup>37</sup> PDD at 41.

<sup>38</sup> Planning Commission, 2011. *Interim Report of the Expert Group on Low Carbon Strategies for Inclusive Growth*, at 37; <http://moef.nic.in/downloads/public-information/Interim%20Report%20of%20the%20Expert%20Group.pdf>

<sup>39</sup> International Energy Agency, 2011: *Technology Development Prospects for the Indian Power Sector*, at 47. available at [http://www.iea.org/papers/2011/technology\\_development\\_india.pdf](http://www.iea.org/papers/2011/technology_development_india.pdf); Central Electricity Authority, *Letter of 2 February 2010*, available at

[http://www.cea.nic.in/more\\_upload/advisory\\_mop\\_sourcing\\_domestic\\_mfrs.pdf](http://www.cea.nic.in/more_upload/advisory_mop_sourcing_domestic_mfrs.pdf)

<sup>40</sup> *Id.*

<sup>41</sup> See, e.g., David Victor, “He protests too much; India is already going green,” *Newsweek*, Aug. 17, 2009 (“Shortages in coal...are forcing India to accelerate this trend to higher efficiency.”).

<sup>42</sup> EB 22, Annex 3, paragraph 7(a)

<sup>43</sup> PDD, at 2.

<sup>44</sup> <http://www.coal.nic.in/chap10102.pdf>

level of coal subsidies were still in place. By using the much higher current subsidy rates, the *Validation Report* improperly privileges less efficient subcritical coal.

**7. The *Validation Report* used an unreasonably high estimate of project costs for the natural gas alternative.** It is generally recognized that the capital cost of a new combined cycle natural gas-fired unit is about 35 percent of the cost of a new coal-fired unit. However, the *PDD* and *Validation Report* estimate that the natural gas alternative would have a project cost of 51,958 million INR (€ 640/Kw), about 30 percent higher than its estimate for a subcritical plant.<sup>45</sup> This figure is far higher than anticipated in the public literature.<sup>46</sup> A technically sound assessment of the natural gas alternative would likely have shown that a natural gas would be the low cost provider, and that the Project would not be additional.

**8. The sensitivity analysis improperly advantages inefficient subcritical technology by using an unrealistically narrow range of fuel price variation.** The *Validation Report* limits the sensitivity analysis to the minimum range of +/- 10 percent for the price of coal, despite the fact that recent fluctuations have been much higher, and market trends suggest that prices are likely to continue to rise significantly.<sup>47</sup> India is currently experiencing severe coal shortages that are putting strong upwards pressure on coal prices. Indian steam coal prices rose 15.9 percent *annually* between 1994 and 2008 (the most recent year for which data was available),<sup>48</sup> and have risen 25 percent in the last quarter alone.<sup>49</sup> These shortages have constrained electricity production,<sup>50</sup> and have forced plant operators<sup>51</sup> and Coal India<sup>52</sup> to increasingly buy coal in more

---

<sup>45</sup> *PDD*, at 28.

<sup>46</sup> See, National Energy Technology Laboratory, U.S. Department of Energy, 2010. *Cost and Performance Baseline for Fossil Energy Plants; Volume 1. Bituminous Coal and Natural Gas to Electricity*, Rev. 2, ES-5, ES-7  
[http://www.netl.doe.gov/energy-analyses/pubs/BitBase\\_FinRep\\_Rev2.pdf](http://www.netl.doe.gov/energy-analyses/pubs/BitBase_FinRep_Rev2.pdf)

<sup>47</sup> *PDD*, at 25.

<sup>48</sup> Data gathered from EIA: <http://www.eia.gov/emeu/international/coalprice.html> , Indian Coal Ministry Annual Reports: <http://www.coal.nic.in/welcome.html> , BP 2011 statistical review: <http://www.bp.com/sectionbodycopy.do?categoryId=7500&contentId=7068481>; IEA Coal Statistics 2010

<sup>49</sup> Moneycontrol, Rise in power tariffs may further fuel inflation, says RBI, *available at* <http://www.moneycontrol.com/news/economy/risepower-tariffs-may-further-fuel-inflation-says-rbi-568856.html>

<sup>50</sup> See, e.g., “Thermal plants face acute coal shortage,” *India Business Insight*, Apr. 2, 2008; “Coal situation worsens at thermal stations,” *India Business Insight*, May 9, 2008, *available at* <http://www.thehindubusinessline.com/2008/05/09/stories/2008050952240100.htm> ; “Corporate power crisis looms large as key thermal stations starve for coal,” *Business Line*, Aug. 9, 2008, *available at* <http://www.thehindubusinessline.com/2008/08/09/stories/2008080950460300.htm> ; “Inadequate coal linkages hit power stations,” *The Press Trust of India*, Jan. 26, 2009, *available at* <http://www.highbeam.com/doc/1G1-192610842.html> ; “Thermal stations continue to battle coal shortages,” *Business Line*, Apr. 16, 2009, *available at* <http://www.thehindubusinessline.com/2009/04/16/stories/2009041651511500.htm> ; “Shortage of coal, gas to hit power sector,” *Financial Express*, Nov. 2, 2009; “Indian market ready for plants, but needs steady supply of coal,” *Platts Coal Outlook*, Nov. 16, 2009; “India’s NTPC shuts two coal plants on coal shortages,” *Platts International Coal Report*, Nov. 23, 2009.



expensive international markets.<sup>53</sup> Analysts expect this situation to worsen, as the shortage is likely to grow to 250 to 350 million tons over the next 3-4 years.<sup>54</sup> The Indian Power ministry predicts that the shortage will leave up to 42,000 MW of new generation capacity unable to generate electricity.<sup>55</sup> Coal India is finding it increasingly difficult to maintain its historic subsidies, and has warned that it will allow its prices to rise to better reflect global markets.<sup>56</sup> It raised prices by 12 percent in February, 2011, and further hikes are anticipated.<sup>57</sup>

In the face of all trends, it is fanciful to assume that coal prices will only vary 10 percent from the base case over the ten-year project period. Nevertheless, the *Validation Report* justifies the narrow sensitivity analysis on the grounds that Nabha Power will be reimbursed for increased coal costs through a variable component in the tariff.<sup>58</sup> For purposes of the baseline analysis, the fact that Nabha Power has hedged the risk of fuel price rises is irrelevant. Rather, the question is how the benchmark indicator--levelized unit cost of electricity (LUCE)—will be affected for each alternative across a range of reasonable price scenarios. As the *Validation Report* explains elsewhere, the LUCE necessarily includes “all relevant costs like fuel costs.”<sup>59</sup>

## **CONCLUSION**

Based on these concerns, we respectfully request that you recommend that the Executive Board reject this request for registration.

Respectfully submitted,

Steven Herz  
Sierra Club  
[steve.herz@sierraclub.org](mailto:steve.herz@sierraclub.org)

Eva Filzmoser  
CDM Watch  
[eva.filzmoser@cdm-watch.org](mailto:eva.filzmoser@cdm-watch.org)

---

<sup>51</sup> “Adani to invest \$1.6 billion in Indonesian project,” *Reuters*, available at <http://in.reuters.com/article/2010/08/25/idINIndia-51045420100825>

<sup>52</sup> “CIL readies war chest for acquiring overseas mines,” *The Asian Age*, available at <http://www.asianage.com/business/cil-readies-war-chest-acquiring-overseas-mines-082>

<sup>53</sup> IEA Coal Statistics, 2010.

<sup>54</sup> *Coal shortage to rise between 250 mn to 350 mn tonne in next 3-4 yrs: Adani Power*. <http://articles.economictimes.indiatimes.com/2011-07-20/>

<sup>55</sup> *Coal shortage may trip 42,000 MW of new projects*, <http://www.thehindubusinessline.com/industry-and-economy/article1991364.ece?homepage=true>

<sup>56</sup> *Id.*

<sup>57</sup> [http://articles.economictimes.indiatimes.com/2011-03-16/news/28697785\\_1\\_price-hike-salary-hike-cil](http://articles.economictimes.indiatimes.com/2011-03-16/news/28697785_1_price-hike-salary-hike-cil)

<sup>58</sup> *Validation Report*, at 99.

<sup>59</sup> *Id.*, at 96.