# THE HISTORICAL TRAJECTORY OF THE BELO MONTE HYDROELECTRIC PLANT'S ENVIRONMENTAL LICENSING PROCESS!

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### Introduction

This article discusses the historical retrieval of the Belo Monte environmental licensing process, accompanied by the inseparable context of its proposition. The power plant, of great relevance and repercussion, has different moments in its elaboration and affirmation and, as a project with great environmental and social impacts, needs to meet the demands of the national regulation surrounding Brazilian environmental policy.

Belo Monte, from the beginning (1975), suffered heavy resistance, established by environmentalists, social movements, leaders and representatives of populations affected by its construction, and it became a priority to the government once more with the onset of the "energy crisis" (2001), which affected the country, and which brought to light the debate regarding energy generation and energy matrices. However, despite increasing questioning regarding the magnitude of the impact of large hydroelectric plants on the Amazon region, the "hydroelectric lobby" and the interests of big contractors have not yet allowed a rupture of the large dam model in place in Brazil, and thus, the nation's energy matrix is still based on the "clean" modality of the water resources.

Large power plants in Brazil date back to the 70s, such as Paulo Afonso, Itaipu and Tucuruí. It was in this period that Brazil made its choice with regards to the constitution of its energy matrix. Said choice was based on the need for investment in new energy sources and on the physical and natural characteristics of the territory, as well as on technological and cost effectiveness issues (Eletrobrás, 2006), with priority being given to

<sup>1.</sup> I thank the Post-graduation in Environmental Science Program of the Universidade Federal Fluminense (Fluminense Federal University) - UFF, especially the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Coordenation for Improvement of Higher Education Personnel) – CAPES – for their support in carrying out the master's degree research of the author Maíra B. Fainguelernt, which made this publication possible.

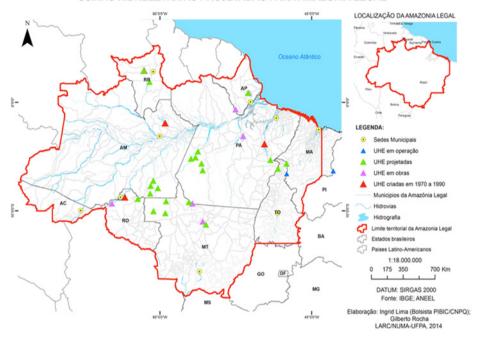
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246 Fainguelernt

hydroelectricity. On the map below (Rocha, 2014), one may notice the concentration of investments in dams within the Amazon region:

Image 1- Hydroeletric plants in the amazon region

#### USINAS HIDRELÉTRICAS PROJETADAS PARA AMAZÔNIA LEGAL



Data source: UFPA, 2014.

However, as noted by Becker (2012) in a reflection regarding large hydroelectric projects in the region:

Will the resources in the Amazon once more be used to fuel the Center-South of the country and the aluminum companies, in a process increased by the construction of waterways to transport the soy from the Center-West? Will this new dynamic generate benefits for the Amazon? Or, on the contrary, will the region only be ravaged by the perverse social and environmental impacts? (BECKER, 2012, p.789)

Will the economic benefits of the interventions in the Amazon continue to be more important than the environmental costs of the large scale developmental works? (Fainguelernt, 2013) The region still plays a role as an exporter of energy to meet the demand of other regions in the country and accelerate economic growth, as is the case in the Southeast-North of MG region – which will receive all the energy generated by Belo Monte (Quintslr et. al, 2011).

According to the Ministry of the Environment (MMA), environmental licensing is an administrative procedure and an important instrument in the country's National Environment Policy, its main goal being to obtain greater control over the human activities that utilize natural resources and over enterprises that cause environmental degradation (Fainguelernt, 2013). Ibama (201) notes that licensing is a process that establishes conditions, restrictions and measures to protect the environment in three distinct stages: (I) Preliminary License – LP; (II) Installation License – LI; (III) Operation License (LO). It is worth noting that the Belo Monte environmental licensing process presented the following stages:

Table I - Environmental Licensing Process

| Stages                        | Dates         |
|-------------------------------|---------------|
| Preliminary License           | February 2010 |
| Partial Installation License* | February 2011 |
| Installation License          | June 2011     |
| Operation License             | November 2015 |

Data source: <a href="http://www.ibama.gov.br/licenciamento">http://www.ibama.gov.br/licenciamento</a>

## Methodology

The scenario presented is based on a bibliographic research undertaken from books, theses, dissertations, academic journals and records. The main primary sources utilized were official documents pertaining to the Belo Monte environmental licensing, such as records of public hearings, public civil lawsuits and technical feedback from the agencies responsible for the evaluation of the enterprise's impacts.

## The first studies and reports regarding Belo Monte

The project started under the repressive and totalitarian context of the military dictatorship, when the first studies for hydroelectric usage of the Xingu river in Pará initiated. This period was marked by the construction of the large hydroelectric usage projects in Brazil, within the parameters of the national-developmentalism project – for more details, refer to Boanada (2015, in this issue of the magazine) – and this preference was based, according to arguments from official agencies, on the physical and natural characteristics of the territory, as well as on technological and cost effectiveness issues (Eletrobrás, 2006). Furthermore, it is worth noting that in 1973 the first global oil "shock" occurred, which encouraged the Brazilian government to further intensify its investments in new energy sources. In 1975, the Proálcool – National Alcohol Program - was created,

<sup>\*</sup> Partial License did not exist in Brazilian legislation at the time, on page 19 of this article, one may better understand the problem at hand.

with governmental subsidies and with two very clear goals: substitution of fossil fuels (Bermann, 2008) and reduction of dependency on oil coming from the Middle East.

According to the Xingu Alive Forever Movement (MXVPS)<sup>ii</sup>, the mapping of the Xingu river basin was carried out, still in 1975, by the National Consortium of Consulting Engineers S.A., a member of the Camargo Corrêa group. The inventory elaborated in this period proposed a project of five hydroelectric plants in the Xingu river in Pará, as shown in the table below.

Table II - Inventory of Hydroelectric Usage in the basin of the Xingu river

| Hydroelectric Plant | Location    | Foreseen potency | Reservoir             |
|---------------------|-------------|------------------|-----------------------|
| UHE Iriri           | Iriri River | 910 MW           | 4.060 Km <sup>2</sup> |
| UHE Jarina          | Xingu River | 559 MW           | 1.900 Km <sup>2</sup> |
| UHE Kokraimoro      | Xingu River | 1.940 MW         | 1.770 Km <sup>2</sup> |
| UHE Ipixuna         | Xingu River | 2.312 MW         | 3.270 Km <sup>2</sup> |
| UHE Babaquara       | Xingu River | 6.274 MW         | 6.140 Km <sup>2</sup> |

Data source: FUNAI, 2009, p.10.

It is important to note that History is not linear and the Belo Monte project, known as the Altamira Hydroelectric Complex in the 70s, went through different moments in its elaboration, which also indicated the dynamic of the environmental licensing process (2010-2015). As stated by Fearnside (2006), due to the scale and the nature of the impacts in the plant, this is the "center of controversies regarding the decision making process for large infrastructure projects in the Amazon".

According to anthropologist Antônio Carlos Magalhães (2009):

For the last thirty years or so, the actors and the stage have remained the same: indians, traditional population, civilian society, etc., on one side, government and its accomplices on the other; the stage, the Xingu's hydrographic basin; the scenery, the Altamira microregion (Magalhães, 2009, p.39).

In the '70s, Kararaô was still Belo Monte's name and its meaning related to the "war cry" of the Kaiapó ethnicity, which consists of a group of indigenous people who are native to the South of Pará and the North of Mato Grosso, which is quite symbolic and ironic, given the resistance presented against the power plant from the beginning.

In 1980, Eletronorte initiated studies regarding the technical and economic feasibility of the so-called Altamira Hydroelectric Complex (PA), which encapsulated the Babaquara and Kararaô (currently Belo Monte) power plants, with the original conception being one of a larger project, with a larger predicted flooding area than that which exists today (Switkes & Seva, 205).

Six years later, Kararaô came to be, under the logic of the José Sarney government (1985-1990), the best alternative for the integration of the Xingu river power plants to the Brazilian Interconnected System (SIN).

In 1987, the 2010 Plan was released, elaborated by Eletrobrás and the Ministry of Mines and Energy (MME). This plan consisted of the long-term planning of the electricity sector regarding the dams which were expected to be constructed across all the country by the year 2010, among others which did not yet have a construction date. As stated by the Technical Feedback of the Indian's National Foundation (Funai, 2009), this Plan proposes the construction of 165 hydroelectric plants in the country, 40 of which in the Amazon region.

An initial version of the environmental studies regarding the two predicted power plants on the Xingu river was elaborated by the National Consortium of Consulting Engineers (CNEC) and this data collection for the studies of many specific environmental issues involved research institutions throughout Brazil (Fearnside, 2005).

The Final Report on Hydroelectric Inventory Studies of the Xingu Hydrographic Basin was approved in 1988 by the National Department of Waters and Electric Energy (DNAEE), in the same year in which our Federal Constitution was promulgated (1988); The dam complex of the Xingu river, if constructed, would encompass majoritarily indigenous territories. For this reason, based on the promulgation of the Federal Constitution of 1988, it was deemed unfeasible due to the recognition of the demarcation of Indigenous Lands (Tis).

In 1989, the 1st meeting of the Indigenous Peoples of the Xingu took place in Altamira (PA). According to the technical feedback from Funai, the greatest objective of this meeting was to protest against the decisions made without the participation of the affected indigenous peoples, and also against the construction of the Xingu Hydroelectric Complex (Funai, 2009). This event became a landmark in the historical trajectory of Belo Monte due to the demonstration of Tuíra (indian of the Kaiapó ethnicity) who held her machete against the face of the then-director of Eletronorte, Muniz Lopes, as a way of expressing her indignation with regards to Belo Monte. This landmark was also significant for having determined that the name of the Kararaô plant (of Kaiapó origin) could no longer be used by the company, causing the name to be changed, from that year on, to Belo Monte (Switkes & Seva, 2005). In the late '80s, Eletronorte requested approval and concession, after submitting the Final Report on Studies of Feasibility of Hydroelectric Usage (AHE) of Belo Monte.

## The resumption of the project as a government prority

In the 1990s, the beginning of the economy's liberalization took place, characterized by the decisions made by the Brazilian government to adopt the precepts of the neoliberal offensive in the world. Such precepts extolled the reorientation of the role played by the State productive sector, containment in public spending for social and human rights policies and policies regarding the defense of rights and stimulus towards the privatization of strategic sectors. Such privatizations affected several sectors of the economy, including

the energy sector. In this sector, the privatizations occurred mainly in the field of electric energy distribution and not in that of energy generation. It is important to note the contradictions – or the dismantling – which took place in this period, which went against the efforts to constitute an integrated electric sector management system as a public policy, and not merely as a piece of merchandise to be operationalized.

Given the legal constraints, a new project was approved in 1995 by DNAEE and Eletrobrás. The idea was to make the project more acceptable to environmentalists, social movements and populations affected by the construction that resisted to the enterprise by reducing, for example, the power plant's reservoir.

Still under the government of the then president Fernando Henrique Cardoso (1995-2002), Belo Monte was recognized as strategic by the National Council of Energy Policy (CNPE) in the development of hydroelectricity until 2010.

The following year (2002), during the electoral campaign of Luís Inácio "Lula" da Silva (2003-2010), a report was released aiming at better defining "The Role of the Amazon in the Development of Brazil" and to that end, already on the first page, the government undertook the commitment of respecting regional diversity.

It is worth noting that the project dragged on until the second decade of the 21st century, in a context marked by the end of Luís Inácio "Lula" da Silva's second term in government (2007-2010) and by the beginning of the term of the first woman to become President of the country, Dilma Rousseff (2011), former minister of Mines and Energy and former chief of staff.

A relevant fact marks a rupture in the conduction of energy policy captained by the Brazilian electricity sector, for in the beginning of 2000 an energy "crisis" took place, due to the insufficiency of water in the reservoirs in the Center-South region of the country (Fearnside, 2004). This episode affected the electric energy supply in some regions, due to the difficulty of transmission and the unfavorable hydrologic conditions of a great part of the Southeast and Northeast regions of Brazil. This fact called attention to the matter of energetic sustainability, creating space for political debate, by considering the procedures that structure the decision making and by rethinking the Brazilian energy matrix (Bermann, 2001). An emergency plan to increase the energy supply was created by the Ministry of Mines and Energy (MME). This plan considered the construction of fifteen hydroelectric plants, including the Belo Monte Complex. The consequence was the rationing of electric energy by part of the population and the interruption of energy distribution (nicknamed "apagoes" or "blackouts"). Even though the resumption of the project as a government priority in 2001 - via the Growth Acceleration Program - introduced alterations regarding the previous project (1970 decade), as listed on the critical analysis undertaken by the Specialists Panel (2009), the project still contained flaws and omissions, such as the failure to comply with conditions demanded by the agencies in charge.

It is worth noting the definition of the areas affected by large hydroelectric plants, because the notion of affected, many times, is restricted to that which is flooded or waterlogged and, as such, other impacts (social, cultural and symbolic) may be disregarded (Vainer, 2008).

According to data of the Basic Environmental Project released by the North Energy Consortium, the Area of Direct Influence (AID) of the UHE is formed by the cities Altamira, Vitória do Xingu, Senador José Porfírio, Anapu and Brasil Novo. The Area of Indirect Influence (AII) includes Medicilândia, Uruará, Placas, Porto de Moz, Gurupá and Pacajá.

The critical analyses of the studies of environmental impacts states that, in addition to the hydrous security in the region being threatened, the reduction of the power plant's downstream flow will cause several impacts on the aquatic habitats of the Xingu river and, consequently, on the riverine communities, fishermen and family farmers who live in the region and depend on vegetable exctractivism (such as acaí, cocoa and buriti), fishing and subsistence crops. In 2000, Case 08620.2339/2000 was opened in Funai so that the agency was tasked with accompanying the environmental licensing. On that same year, the Foundation for Support and Development of Research (Fadesp) was hired by Eletronorte to elaborate the Environmental Impact Study (EIA) of the Belo Monte power plant. The Interconnected National System (SIN) was constructed as a solution for the matter of electric energy transmission and connection of the several points that form this network in Brazilian territory. This system, operated by the National System's Operator (ONS), according to official documents, is still in expansion. The official objective is to integrate the North region, which is composed of isolated systems of electric energy generation and possesses a privileged potential already installed (and yet to install) (ELETROBRÁS, 2006).

Still in 2001, the MPF filed a Public Civil Law suit (ACP) to suspend the Belo Monte EIA. The filing was based on an injunction of the 4th Federal Court of Belém for many reasons. Some points of questioning related to the obligatoriness of consulting the indigenous peoples that were affected (Indigenous Hearings), and obtaining authorization from the National Congress (Switkes & Seva, 2005). Such problems pointed out by the ACP are not just legal in nature, and the MPF was also sued several times by social movements.

In this period, different segments of the civil society organized themselves on a wider scale and several entities, such as the MDTX, that later formed the Live, Produce and Preserve Foundation (FVPP), gathering one hundred and thirteen social organizations that elaborated a document called "SOS Xingu: A call to common sense regarding the damming of rivers in the Amazon".

At this time, many groups of people had already begun to constitute public arenas of social engagement and participation, in a more organized manner, seeking to problematize their situation and the way it was being incorporated in the development model at hand. Rancière (1996) recognizes the importance of the constitution of these spaces of participation, or "public arenas", as institutional guarantees of rights and liberties. However, the author also asserts that such devices do not determine the effectuation of "democracy", they only have the potential of providing the manifestation of divergences. In 2002, the National Electric Energy Agency (Aneel) released the studies on the feasibility of the Implantation of the Belo Monte Hydroelectric Complex. In that same year, Luís Pinguelli Rosa took over presidency of Eletrobrás and, publicly, pronounced

that the project should be duly discussed, and that the recommendations of Ibama and MMA would also be met and respected.

The report released in 2002 by the government presented a brief analysis of the country's energy sector, and highlighted some conflicts in the Amazon region: Belo Monte (Pará), Gás de Urucu (Amazonas) and eighteen dams predicted for the Araguaia river basin and Tocantins (Goiás/Tocantins). It became evident in the document that the government understands that the Brazilian energy matrix, basically supported by hydroelectricity and large dams, leads to social and environmental impacts on the Amazon basin as a whole. The notion of "development" present in this report was influenced by the paradigm of "sustainable development" and by the perception that social groups in the Amazon who fight for the maintenance of their form of territorial appropriation must have their rights secured in the decision-making processes.

In 2004, there was an interruption of the Belo Monte licensing process, due to the identification of several flaws pointed out by the MPF. Even so, one year later (2005), the MME, through its then-minister Dilma Rousseff, formalized to the MMA and to the Funai that Belo Monte would be considered a strategic priority of government (Funai, 2009).

The Council of Defense of the Right of the Human Person (CDDPH), based on the denouncements of rights violations, instituted a Special Commission (CE) to investigate the denouncements made by the Movement of Those Affected By Dams – MAB.

In 2006, the Belo Monte environmental licensing was suspended once more, stopping studies on the environmental impacts from advancing, since they alleged that the indigenous peoples affected should be listened by the National Congress. In the following year, after several legal hurdles, Belo Monte's AHE's EIA was authorized to continue (Funai, 2009) and a plan was elaborated by the Leme Engineering Company<sup>iii</sup>.

In late 2007, the efforts towards the continuity of the environmental licensing were noticeably intensified. In a short time, a process of communication with the populations affected by the enterprise began (Funai, 2009) and the Leme Engineering Company coordinated nine meetings in the region of the Belo Monte AHE which were known as "Social Participation Workshops" and took place in the following locations: Ressaca, Sol Nascente Agrovillage and Ramal do Pimental (Altamira city), Leonardo da Vinci Agrovillage and Santo Antônio (Vitória do Xingu city), Municipal Public School and Belo Monte do Pontal (Anapu/PA city). However, according to the Constitution (1988), they should ensure that the indigenous populations affected by any hydroelectric enterprise be heard and duly consulted. Still, an ACP of the MPF was filed precisely regarding the non-compliance of the indigenous hearings in the affected indigenous villages, which did not meet the position of FUNAI, who guaranteed that several meetings were made in the villages and that the polling was carried out as determined by law.

Nearly twenty years after the I Meeting of Indigenous Peoples in Altamira, the Xingu Alive Forever Meeting (2008) took place, bringing together representatives of the main affected populations, social movements, civil society organizations, researchers and environmentalists. This meeting allowed the articulation of the network of the same name, which went on to play a relevant role in the denouncements and demonstrations.

As a result, the "Xingu Alive Forever" Letter (2008) was elaborated, with the goal of presenting a new development proposal for the Xingu region to the public authorities.

In March 2009, the EIA were delivered toIbama, however, according to Funai, without considations regarding the indigenous component. According to an Ibama document (2010), the indigenous lands to be affected would be: Paquicamba, Cachoeira Seca, Kararao, Uruaya, Xipaya, Bau, Menkragnoti, Parana do Arauato, Rincheira Bacaja, Arara, Arawete Igarape Ipixuna, Koatinemo.

Still in 2009, the four public court hearings planned for the reopening of the case took place in the cities of Brasil Novo (10/09/2009), Vitória do Xingu (12/09/2009), Altamira (13/09/09) and Belém (15/09/09). According to Fainguelernt (2013), obstacles could be highlighted with regards to the participation in the hearings undertaken: (i) the available location for the public arenas to take place were far from the indigenous villages and communities involved and the roads connecting the cities in the region were precarious; (ii) the time offered for the affected populations to expose their interests and doubts regarding the project was short; (iii) several riverside communities stated in interviews to Brazilian communication outlets that the language utilized in the meetings was inappropriate, which made an understanding regarding the project and the due appropriation of the content relative to the environmental and social impacts of the power plant impossible.

As such, the MPF recommended to Ibama the holding of at least thirteen more public hearings, to better encompass the region that will be affected by the construction.

 UHE Belo Monte
 Brazilian Electric Centrals S.A.
 BRASIL NOVO
 PA
 10/09/2009

 ALTAMIRA
 PA
 13/09/2009

 BELEM
 PA
 15/09/2009

Table III – Public hearings held in 2009

Source: http://www.ibama.gov.br/licenciamento

Still according to the MPF (2009/2010), the hearings held were improperly conducted and also harbored problems in the manner of ensuring the participation and rights of the population affected by the enterprise. Researchers from different universities in the country engaged in the process and elaborated the "Specialists Panel", which conducted a critical analysis of the Belo Monte EIA. This document questioned, at several levels of impact, the feasibility of the enterprise.

According to Eletrobrás (2011), the CNPE defined that only the Belo Monte UHE would be constructed on the Xingu River Basin. Still according to the company, the Belo Monte configuration is different from that of other power plants and will present three

sites: Pimental, Bela Vista and Belo Monte. In 2009, the Federal Court suspended the licensing once again in accordance with the MPF's request and determined that new public hearings be held so that the affected populations might actually participate. During this time, several indigenous leaderships came together and wrote the "Statement of the Indigenous Peoples regarding the Belo Monte power plant".

In December of 2009, a public hearing regarding the EIA was held, evidencing once more the conflict between indigenous populations and government representatives.

In February 2010, the first preliminary licence (LP) was granted by Ibama and Aneel approved the Belo Monte feasibility studies. Along with this license, Ibama listed forty conditions relative to the affected populations, water quality, fauna, basic sanitation, recovery of already degraded areas, among others. In the following month, the TCU released the cost estimate for the construction of the power plant and the MME set the date for the electric energy bidding for April 2010. That way, Neoenergia entered the dispute for the Belo Monte UHE, by joining itself to Andrade Gutierrez and Votorantim Energy, thus forming a consortium.

Certain irregularities, considered by Pará's MPF as severe, also took place regarding the LP, such as the lack of an in-depth study contemplating the indigenous matters involved and the non-inclusion of the contributions made in public hearings. Still according to the MPF, official documents and technical feedback prove that Ibama was not sure about Belo Monte's environmental feasibility.

In the last few years, controversies regarding the project hit the international stage of debate in a significant way due to the intensification of conflicts during the environmental licensing process.

In February 2011, indigenous leaderships, organizations and social movements convened in a demonstration in Brasília (DF) against the power plant project. Protests took place throughout Brazil with the intention of also blaming the BNDES, due to the confirmation that it had approved a loan of R\$ 30 billion towards the construction of the power plant. The government's effort to have the bidding take place no matter what was notorious, and made use of public funds from BNDES, originating from the National Treasury and from the Worker Support Fund (FAT).

Nationwide meetings, seminars, demonstrations and protests took place throughout the last three years. Dissent and conflict also became more visible in the State, when, according to a report by Época Magazine (from January 12th 2011), Abelardo Bayma, then president of Ibama, resigned from the position, after being pressured by Eletronorte upon not agreeing to concede the definitive license for the implantation of the power plant.

Despite society's pressure and without complying with the previously listed conditions, Ibama conceded "authorization of suppression of vegetation" to the North Energy Consortium (NESA) in 2011. This fragmented "partial license" does not exist in the Brazilian environmental legislation and will allow the deforestation of 238.1 acres, 64.5 of which are Permanent Preservation Areas (APP). In this stage, the licenses must be bound to the compliance with conditions of which, for Belo Monte, there were forty for general purposes and twenty six specific to indigenous populations. The installation

license (LI) was issued by Ibama in June 2011 and determined a series of actions that form the Basic Environmental Plan (PBA). Ibama accompanied the compliance of the actions, along with the Managing Committe of the Regional Sustainable Development Plan (PDRS) of the Xingu, composed by representatives of the federal, state and municipal governments, by social movements, organizations, and unions of urban and rural workers as well as fishermen and indigenous communities. This plan articulates the Federal Government and the Pará State Government, and intends to promote the sustainable development of the region.

According to the MPF in Pará, the conditions of LP 342/2010 were not resolved by Eletrobrás as they should have been, which allows for its suspensions and the objections regarding the legality of the procedure. As a result of this made up "partial license", a new protest took place in Brasília against the construction of Belo Monte. Several representatives and leaderships of the affected populations, social movements (such as the MXVPS) and environmentalists came together and rallied in front of the Planalto to calling for more transparency and social participation in the discussion of the project. This protest counted with the presence of the Mebengokre (Kaiapó) indians, who made their "war dance" and, as such, expressed their indignation with the project. A great part of the leaderships noted that they have not been previously consulted regarding the project and the fear of the imminent pressure and invasion of their land by thousands of people seeking the "promised job and economic growth"

The polemics surrounding Belo Monte remained intense and several announcements came about on the country's main communication outlets, attempting to diffuse the possible benefits and positive impacts of Belo Monte.

As stated by the study undertaken by International Rivers (2010, the financial institutions should better evaluate the risks associated to the enterprises they intend to finance. The study proves that the Belo Monte Hydroelectric Complex would not be apt to be financed, due to still due to still needing to prove its economic, social and environmental feasibility, as well as to comply with environmental regulation.

In January 2011, Funai stated, in a letter to the North Energy Consortium (2011), its position with regards to the initial power plant construction installations (Installation License - LI):

Binding condition with serious problems; Create communications plan with the indigenous communities, with informations regarding the phases of the enterprise, the licensing and all activities related to the Belo Monte AHE (FUNAI, 2011, p.3).

Said statement by Funai reveals the non-compliance with several predicted binding clauses and the lack of investment of the North Energy Consortium in informing and consulting the indigenous populations. As such, one understands the claim by the indigenous movement on Belo Monte, and it is worth noting that Brazil is a signatory of the 169 Convention of the OIT which deals with the following:

Regulates the responsibility of governments in developing, with the participation of the interested peoples, coordinated and systematic actions in order to protect the rights of these peoples and guarantee

that their integrity will be respected; as well as the right to the indigenous hearing on the governmental issues and policies that affect the indigenous and/or tribal peoples and lands (FUNAI, 2011, p.9).

It is necessary to highlight the intensity of the international repercussion that the polemic and the demonstrations against the Belo Monte project achieved from 2009 to 2011 and the recent intervention by the Organization of the American States (OEA).

According to PAC information, the current project brought significant changes, such as, for example, the reduction of the flooded area, and the construction of only one adduction channel, said channel being responsible for water diversion in the river. However, the investments in the project remained very high, around R\$ 25.8 billion. Among these investments, R\$ 500 million were directed towards actions in the Sustainable Regional Development Plan (PDRS) which is already being developed in the region.

The assessment of social impacts of large enterprises in the Amazon is a sensitive subject, frequently approached in an improper manner in the studies undertaken. The World Dam Committee report (2000) corroborates this perception when it states that:

regarding the social impacts of the dams, [...] frequently the negative effects are not adequately assessed or even considered. The range of these impacts is considerable – on life, subsistence and the health of the affected communities that depend on the riverside environment (CMB, 2000).

Dr. Felício Pontes Jr., MPF/Pará attorney, pointed out that Ibama accepted the EIA-Rima of the Belo Monte UHE even with an absence of documents considered to be relevant, such as studies on water quality, speleology and surveys on indigenous populations affected by the power plant. The result of this is verified by the lack of a modification in the manner of conceiving the Brazilian energy project, maintaining the situation as it is, without wide public debate regarding the energy matrix and the decisions made by the government in this area.

The works were planned to start in 2011, however, effectively, they began in 2013, two years late. According to data from the North Energy company, 19 thousand direct jobs were created, which does not necessarily translate solely as a positive impact, as this is also related to one of the most significant impacts in the urban area, because with the populational increase, the infrastructure in the region becomes even more precarious, aside from the violence within the cities that has increased.

Estimates made in the EIA state that 90 thousand people were attracted to the region, 32 thousand of which will remain after the conclusion of the works. This way, the undertaking of a program of incentive towards professional training and the development of productive activities was already planned, to be developed in parallel with the construction and operation phases of Belo Monte, in eleven cities.

In February of 2015 the ISA published an article on the monitoring of the effectiveness of the Belo Monte construction conditions, made by the Getúlio Vargas Foundation (FGV). The report points out managing and planning problems, a lack of citizen partici-

pation and of articulation between public power and North Energy, which puts at riskthe efficiency of some actions, such as basic sanitation and education. Another important fact that the Institute reported was with regards to the non-compliance by the BNDES with a decision of the CGU that requires the release of data from the environmental reports of the Belo Monte financing. In late 2015, the ISA also filed a complaint to the CGU, demanding that the data be supplied, after the bank sent a note to the organization insisting on the allegation that they were confidential.

According to information from North Energy, in late 2014, Belo Monte already had 70% of its construction complete. However, until mid-2015, the company had not yet obtained the Operation License (LO). Shortly after North Energy formalized the LO request in February 2015, the MXVPS mobilized society to sign a petition via internet with the intention of demanding that Ibama would not concede the final license to Belo Monte. The main arguments of the petition regarded the hundreds of families that lived in the flooding area who had not yet been resettled, as well as the fact that the basic sanitation project in Altamira had not been finalized yet and all the sewage was still being dumped in the Xingu river.

It is worth noting the protagonism of the actions of the Federal Public Ministry, which for years has been promoting not only class actions, but also a deeper reflection regarding the case. In late 2015, they released an inspection report of the affected riverside areas with considerations that deserve to be highlighted, such as: "(1) The PBA premises are not being enforced in the process of compulsory removal of the affected river dwellers; (2) There is a mismatch between the speed that North Energy imposed upon the compulsory removal in order to obtain the Operation license from the Belo Monte UHE and the measures that should be adopted for the riverine dwellers to hold the conditions needed to endure this process without risks to their physical and cultural survival; (3) Riverside groups which, although embodying the expression of a traditional way of life, which is a recognized mark of the north region, were invisible to the licensing process and today do not find in this process solutions that are adequate to their peculiarity; (4) Within the proposals being offered by North Energy, none were found that allow for those affected to visualize a future condition capable of maintaining their life style; (5) The river dwellers are being coerced into accepting indemnity."

Despite the controversies and the several conditions not yet complied with by North Energy, in November 2015 the LO was granted by Ibama and the flooding of the dam was authorized.

### **Final Considerations**

The Belo Monte Power Plant reveals several challenges common to both, the evaluation of environmental impact and the environmental licensing processes throughout the Brazilian Amazon (Fearnside, 2006). With regards to the construction of large hydroelectric dams in the region, there is a repetition of the same pattern of public policy, which disrespects Brazilian environmental legislation and the rights of traditional populations affected by the construction, who are, on most occasions, considered "hindrances"

to economic development. The role of the Amazon in the development of the country implies the guarantee of rights to the peoples and environmental protection. However, one of the greatest challenges still present in the region relates to the consideration of the knowledge and well-being of the Amazonian peoples (Moran, 1990).

The Brazilian state's investment in large hydroelectric plants is a polemic topic in Brazil, especially concerning its close relationship with private capital, respect to environmental legislation and the democratic debate with effective participation of the populations affected by the projects. However, from different scenarios in the project's trajectory, does it not become evident that the problem lies not in the use of private or public financial resources, but rather in the managing process of development in the country? The downsizing of social and environmental impacts of Belo Monte accompanied the project's entire trajectory, which may be evidenced by the environmental licensing process having been given its continuity despite contrarian positions by key entities in the matter, such as IBAMA, MPF, TCU and the non-compliance with the conditions.

As assured by Jacobi (2000), a new conception of the decision making process would, in fact, place participation as a convergence of interactions between social categories, classes and different interest groups. However, within the context of the developmental ist logic still in course in the country, the participation of affected populations in decision making processes of large enterprises in Brazil, especially in the Brazilian Amazon, is a polemic aspect, filled with controversy.

From this panorama, two aspects become particularly clear. The first one related to the "recent and immature" Brazilian democracy, the continuity of the developmentalist logic in the country that, in spite of the different governments, remains present from the '70s to modern times in the Amazon. The second aspect relates to the dependency on large hydroelectric plants despite the problems and challenges becoming ever more repetitive.

Historical retrieval shows that, regardless of the different context in which it was inserted, be it at the moment of elaboration (1975), or in the resumption of the project (2001), the polemic environmental licensing process at hand a reverberated directly up on the guarantee of rights to the populations affected by the enterprise. Currently, it is necessary to coordinate works and actions with the local population, with the intent of minimizing social and environmental impacts and reversing the chaotic situation of the city of Altamira, which finds itself, after a process of population growth and compulsory displacement, with higher crime and prostitution rates and precarious health conditions.

The complex challenge of reconciling antagonistic interests put forth in the public participation arenas and the decision making in large infrastructure projects with the developmentalist direction of the Brazilian State, which, in explicit fashion, exerts an important centrality in the guarantee of concretion of projects such as Belo Monte.

The Brazilian Amazon region houses an immense ethnical, social and cultural diversity, which generates a "sociocultural mosaic" with the presence of indigenous populations, quilombola communities, bayou inhabitants (rubber tappers, chestnut collectors, river dwellers, etc.), migrants and rural extractivists (MMA, 2008). It is worth noting that the current need for construction of critical thought regarding sustainability implies

the consideration that social matters have, among their most significant expressions, the environmental issue.

The debate regarding Belo Monte is inserted within a wider context, which calls into question the country's development model and its repercussions on energy planning in the Amazon region (Fainguelernt, 2013). Therefore, the analyzed conjuncture involves a deeper reflection regarding the energy sector and the exploitation of water resources in the country and, from the Belo Monte case, some lessons may be learned for future hydroelectric enterprises: (I) social and environmental issues must not be placed in the background in face of the imperatives of an economic development model associated with the notion of progress; (II) the development conditions and the contradictions during Belo Monte's environmental licensing process suggest an authoritarian nature of the power plant project, which evidences the need for a more social, humane and democratic conception of society; (III) Finally, the challenge related to the formulation of energy solutions persists, since fundamental dimensions of sustainability still have not been duly valued in the planning and development of public policies.

### Notes

- i According to the Ministry of the Environment (2009), the environmental licensing was regulated by the CONAMA Resolution 001/86 which established the general directives for the Environmental Impact Study (EIA) and its Environmental Impact Report (RIMA).
- ii The Xingu Alive Forever Movement (MXVPS) is formed by several organizations and social and environmental movements agains the implementation of the Belo Monte hydroelectric dam project in the Xingu river.
- iii The Topography, Engineering and Aerial Surveys S/S Ltd. TOPOCART undertook the field study with regards to the survey of the topobathymetric section and the water level measurement Altamira, Ambé and Panelas bayous in the city of Altamira PA
- iv To verify, access http://ibama.gov.br/phocadownload/noticias ambientais/lo %201317 uhe belo monte.pdf

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Submitted on: 19/10/2015 Accepted on: 29/02/2015

http://dx.doi.org/10.1590/1809-4422ASOC0259R1V1922016

# THE HISTORICAL TRAJECTORY OF THE BELO MONTE HYDROELECTRIC PLANT'S ENVIRONMENTAL LICENSING PROCESS

### MAÍRA BORGES FAINGUELERNT

Abstract: The purpose of this article is to present the historical trajectory of the hydroelectric plant of Belo Monte on the Xingu River. The plant, the third largest in the world and one of the most important works of the "Growth Acceleration Program" in Brazil, in the broader context, calls into question a developmental model and its implications for the energy planning in the Amazon region. The energy use of the Xingu River basin was also proposed during the military dictatorship in Brazil and, even after forty years is still emblematic for continuing to be full of controversies along its course. The initial premise of the research establishes that the lack of social and environmental impacts of the project followed the entire trajectory of Belo Monte and this case study brings important lessons for improvement of this instrument of Brazilian environmental policy.

Keywords: Hydroelectric Plants, Amazon, environmental licensing.

Resumo: O presente artigo tem como objetivo principal apresentar a trajetória histórica de Belo Monte no rio Xingu no Pará. Terceira maior do mundo e uma das obras mais importantes do Programa de Aceleração do Crescimento no Brasil está inserida em contexto mais amplo, onde se põe em causa o modelo de desenvolvimento e suas repercussões no planejamento energético na região amazônica. O aproveitamento energético da bacia do rio Xingu foi proposto ainda durante a ditadura militar no Brasil e, mesmo após quarenta anos, ainda é emblemático por continuar repleto de controvérsias no seu percurso. A premissa inicial da pesquisa estabelece que o subdimensionamento de impactos sociais e ambientais do empreendimento em questão acompanhou toda a trajetória do projeto e o presente estudo de caso apresenta importantes lições para um aperfeiçoamento desse instrumento da política ambiental brasileira.

Palavras-chave: Usinas Hidrelétricas, Amazônia, licenciamento ambiental.

**Resumen:** Este artículo tiene como objetivo presentar la trayectoria histórica de la central hidroeléctrica de Belo Monte en el río Xingu. La planta, la tercera más grande del mundo y una de las obras más importantes del Programa de Aceleración del Crecimiento en Brasil,

cae en un contexto más amplio, donde socava el modelo de desarrollo y su impacto en la planificación energética en la región amazónica. También se propuso el uso de la energía de la cuenca del río Xingú durante la dictadura militar en Brasil y, aun después de cuarenta años sigue siendo emblemática para continuar llena de controversias en su ruta. La premisa inicial de la investigación establece que la infradimensión de los impactos en cuestión siguió toda la trayectoria del proyecto y este estudio ofrece lecciones importantes para la mejora de este instrumento de la política ambiental brasileña.

Palabras clave: Plantas Hidroeléctricas, Amazon, de licencia ambiental.