

Social License to Operate: The precursor case of success of Caçu and Barra dos Coqueiros HPPs

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Abstract:

The Social License to Operate (SLO) has stood out with entrepreneurs and financing agents as a structuring factor in their Risk Management strategies. However, SLO studies applied to the generation of hydroelectricity are still restricted, mainly in Brazil. In this context, this article evaluates the stakeholders' engagement process during the first stage of the environmental licensing of the Caçu and Barra dos Coqueiros Hydroelectric Power Plants, in Claro River, State of Goiás. The analysis considers SLO key variables such as quality of dialogue, minimizing power asymmetries and procedural fairness with communities. It is concluded that the entrepreneur obtained the SLO concomitant with the so-called Preliminary License, which characterizes it as a precursor case of successful practice of the SLO precepts, even before they gained breadth of discussion in Brazil for different productive segments.

Key words:

Social License, Stakeholders Engagement, Social Risk Management.

1. Introduction

There are many cases of hydroelectric power generation projects in Brazil that had their studies and projects, implementation, start and / or continuity of their operation delayed, or even interrupted, due to conflicts with different stakeholders. These conflicts negatively affect cash flows and the attractiveness of projects, in addition to the entrepreneur's public image, including with financing agents. As a result, investors have been increasingly privileging opportunities associated with other sources of energy.

In this sense, in its version for the 2017-2026 period, the Ten-Year Energy Expansion Plan (PDE as in its

Portuguese acronym) recommends that socio-environmental issues must be addressed beyond the licensing process in order to leverage hydroelectric generation in the energy matrix, anticipating the dialogue, seeking the legitimate participation of society, and internalizing these activities in the planning process [3].

Thus, it is highly relevant for companies in the electric power sector to have strategies successfully tested in ventures to minimize conflicts with different stakeholders, guiding their engagement, and reducing social risks and their externalities. These strategies can be analyzed based on the concepts and practices of the Social License to Operate (SLO).

Because it represents the perception of a community regarding the acceptance of a company and its operation in a territory [5] [8] [9], SLO has become an important component in the discourse of entrepreneurs and various social agents, including financing agents, on sustainability, accountability, and corporate social responsibility for projects. SLO is already being discussed for the mining, oil and gas, reforestation, and wind power generation sectors. However, it still has a restricted research environment for hydroelectricity.

In this scenario, the previous licensing stage of the Caçu and Barra dos Coqueiros Hydroelectric Power Plants (HPPs) represents a successful case of obtaining SLO. Both HPPs were implanted in cascade in Claro River, in Goiás State, with a total installed capacity of 155 MW.

The strategies implemented by the entrepreneur are identified here related to the process of dialogue, negotiation and formalization of agreements with municipal public authorities and affected populations in the urban and rural areas of Caçu and Cachoeira Alta municipalities. Such strategies culminated not only in obtaining the so-called Preliminary License in accordance with the entrepreneur schedule goal, as well as with a previous - and unprecedented - recommendation issued by the State Public Prosecutor's Office to the environmental agency (AGMA) for granting the license.

These strategies and their results are analyzed in the light of key variables for the success of the SLO application. Such variables are related to the levels of psychological identification and trust in the company by the stakeholders, quality of dialogue established between the parties, and minimizing power asymmetry.

2. Material and Methods

2.1 Modeling of Social License

Based on a critical review of the concepts applied to the SLO - or, more generally, to the Social License - over two decades, Moffat and Zhang [5] conclude that there is no final definition in the literature regarding the

term. Perhaps, even because of this, the authors point out that sometimes there is an opportunistic appropriation of the Social License by different agents, regardless they are entrepreneurs, activists, or government members.

However, apart from specificities, the authors consider a well-translated basic concept as the SLO resulting from a process of company operations acceptance by a community. This results from partnerships that add shared value for the population and local governments. In short, it is derived from a set of factors that build trust between the parties.

Another point to be highlighted is that the SLO represents an “unwritten” and intangible contract between the parties directly involved in a project and, therefore, cannot be granted by civil, legal or political authorities [5]. In other words, differently from what is sometimes voiced by some representatives of companies, environmental agencies, and / or government bodies, the SLO no longer represents a “bureaucratic” stage in the environmental licensing process for projects. On the other hand, these intangibility and informality give Social License an extremely dynamic and resilient character, as it results from a “[...] changing reflection of the quality and strength of the relationship between an industry and a community [...]” [5].

Thus, according to key variables defined by Prno and Slocombe [7], the SLO depends fundamentally on the social, environmental and political context of the territory, besides being characterized by uncertainty. It should therefore be seen by entrepreneurs and financing agents as an important positive and negative risk-generating factor depending respectively on whether to obtain it or not for corporations and / or projects in a given territory. In other words, to perform an adequate risk management in each enterprise must mean to continuously manage the level of Social License that is held in the territory where it is inserted.

The initial model for SLO has four levels (from lowest to highest): “Withholding or Withdrawal”,

"Acceptance", "Approval" and "Psychological Identification" [8] (Fig. 1a). They are respectively separated by limits of legitimacy, credibility and trust. Thus, when leaving the base level, "Denial", in which social conflicts with the company are common, until exceeding the "Trust" limit, the community and other stakeholders move on to "Psychological Identification" towards the organization / project and to support the company interests. In other words, from the basic to the highest level in Thomson and Boutilier model [8], there is a positive evolution in the level of conflict / cooperation of stakeholders, therefore reducing the negative impacts on the financial value of organizations or ventures.

Thomson and Boutilier [9] complemented their original model by assessing how and at what intensity four factors are isolated or synergistically expressed (Fig. 1b). In fact, these factors end up being related to the four levels of SLO that make up the authors' first model and are dictated by the perceptions of stakeholders regarding (i) the economic benefits that the company / project offers them; (ii) the contribution that the company / project brings to the well-being of local society and the progress of the region, according to its vision of justice; (iii) how the company engages in a mutual dialogue with stakeholders; and (iv) whether the relationship between the parties is based or not on a lasting win-win situation for both.

Moffat and Zhang [5] proposed another model for SLO. However, their variables - "Trust", "Approval and Acceptance", "Procedural Fairness" and "Contact Quality with Affected Communities" - are intrinsically related and justify the levels and factors of the previous models, being, in short, another way to present and test them.

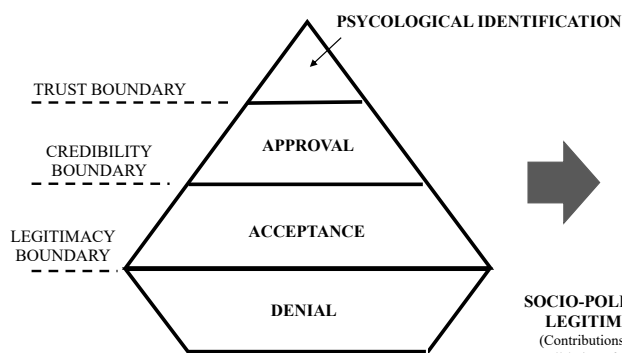
The "Transformational" dialogue is seen as fundamental for obtaining and maintaining the SLO [4], and should last throughout the life cycle of a project, investing in a learning process for the organization and the community for the construction of a collaborative governance of the territory based on trust.

Bahr and Nakagawa [4] point out that the amount of dialogue is not fundamental to trust, but rather to induce interaction between the parties. Using three defining variables of the agents' profile - "Consensus", "Opinion" and "Influence" - these authors highlight the relevance of a detailed and periodically updated mapping of stakeholders for diagnosing agents and interactions existing in a territory, classifying them according to their levels of support to the enterprise, information and influence with other agents.

Finally, it is worth noting that some authors have been pointing out problems in assessing the efficiency and effectiveness of using SLO as an indicator of the social acceptance of an operation by local stakeholders. In this context, Ehrnström-Fuentes and Kröger [2] highlight some risks of cooptation and power asymmetries, presenting contributions for an effective assessment of the level of SLO reached by a given project:

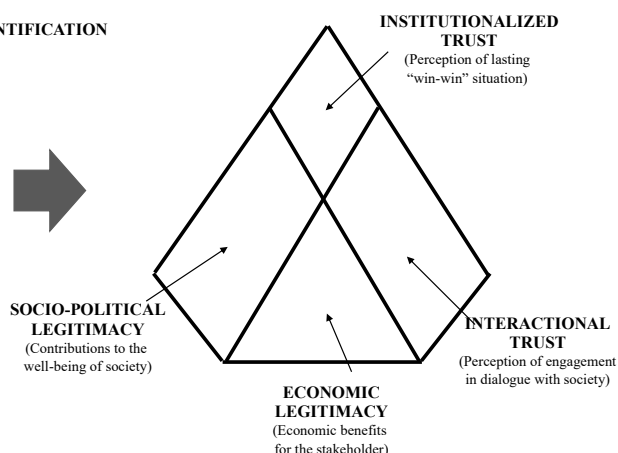
- a. the importance of consulting representatives of the local population with different levels of influence and impact by the project;
- b. the adoption of social vulnerability criteria to select potential interviewees, so that there is no risk of asymmetric power;
- c. the need to evaluate the SLO throughout the life cycle of the project, given that, as the impacts materialize, an initial positive level of acceptance of a project may change.

In view of a critical perspective conceptually similar to that of Ehrnström-Fuentes and Kröger [2], Wright and Bice [10] propose the SLO to be measured also considering the criterion of "Strategic Fields of Action", defined as strategic agendas / alliances and reciprocities around a specific subject or interest, weaving the so-called "social cohesion". The authors recognize that there may be different "Strategic Fields of Action" between and within stakeholder groups, and the entrepreneur must be aware of this network to go beyond simple consultation, evolving towards agreements, whether they are formal or not.



Source: Adapted from Thomson and Boutilier (2011a)

Figure 1a



Source: Adapted from Thomson and Boutilier (2011b)

Figure 1b

Fig. 1 The Social License levels: Evolution of Thomson and Boutilier models

2.2 Application of the LSO framework to the case study of the Caçu and Barra dos Coqueiros HPPs

In order to assess and conclude on obtaining a Social License for the Caçu and Barra dos Coqueiros HPPs in its previous environmental licensing stage, the stakeholder engagement process has been analyzed – especially relative to the communities affected – from the perspective of some pre-selected variables: "Quality of Dialogue", "Procedural Fairness Applied to Communities", "Minimizing Power Asymmetries", and "Strategic Fields of Action".

The choice of these variables is justified given that, according to the model proposed by Moffat and Zhang [5], the way of driving and the interaction between them is a condition of the "Trust" level reached by different stakeholders regarding the entrepreneur and, therefore, the identification of the Social License level in which the enterprise was configured, in accordance with the models of Thomson and Boutilier [8] [9].

2.3 Context of the previous environmental licensing of the Caçu and Barra dos Coqueiros HPPs

According to Prno and Slocombe [7], the stakeholder engagement process during the previous environmental licensing of the Caçu and Barra dos Coqueiros HPPs, and therefore the achieved level of SLO, were analyzed

from the territorial point of view related to socio-environmental, cultural and political terms.

Additionally, an overview was developed on how the aforementioned licensing process had occurred, in order to assess conflicts that might already exist. This overview is based on existing data [6] and semi-structured interviews with professionals of the former entrepreneur responsible for environmental management and stakeholders' relationship.

In July 2002, Alcan Alumínios do Brasil Ltda. won the concession for building and operation both HPPs in the auction promoted by Agência Nacional de Energia Elétrica (Brazilian National Electric Power Regulatory Agency, Aneel). The Energy Complex is located on Claro River, in Paranaíba River watershed, in the southwest region of the State of Goiás. At first, the project implementation was scheduled to start in the first quarter of 2004. After two years of construction, in which the two plants were to be implemented in parallel, the start of generation was scheduled for the beginning of 2006.

However, shortly after winning the concession, a Public Civil Action was filed by the District Attorney of Cachoeira Alta, one of the two municipalities affected by both HPPs, demanding the stoppage of its licensing process until an environmental study was developed facing the entire Paranaíba River watershed

(Fig. 2). The goal was identifying and assessing the environmental impacts that could act cumulatively and synergistically on the watershed, resulting from all the

existing and planned HPPs and small hydroelectric power plants (SHPs).

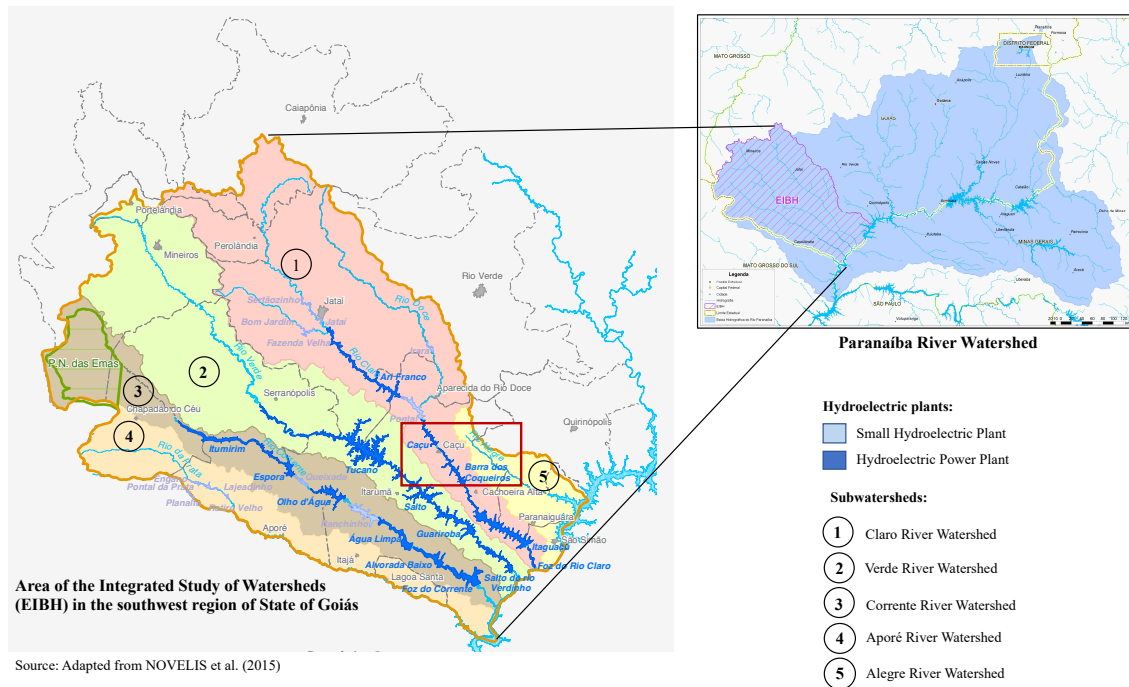


Fig. 2 Hydroelectric projects analyzed in the Integrated Study of Watersheds in the southwest region of the State of Goiás

The preliminary injunction in favor of the Public Civil Action was granted supported by the State and Federal Public Prosecutor's Offices, and other similar legal instruments were generated in the southwest region of State of Goiás. As a consequence, the environmental licensing process of fifteen (15) plants already under concession and / or with environmental licenses already granted was paralyzed as a whole. In addition, in a longer-term scenario, another fourteen (14) enterprises had already been inventoried for the region. The conflict was then made explicit involving both the State and Federal Public Prosecutor's Offices and the defendant of the actions, the environment agency of the State of Goiás (AGMA).

Motivated by the failure of isolated initiatives, a group of five entrepreneurs holding the concession of six plants, including Alcan, started approaching the Public Prosecutor's Offices and AGMA to seek strategies to solve the impasse. As a result, a Term of

Conduct Adjustment was signed in July 2004, which determined the development of the Integrated Study of Watersheds (EIBH, as in its Portuguese acronym) for an area of 40 thousand Km² (Fig. 2), comprising five watersheds, including Claro River, and eighteen (18) municipalities, as Caçu and Cachoeira Alta.

EIBH was carried out by this group of five entrepreneurs from October 2004 to April 2005, and it has been approved by the environmental agency in September 2005. Its analysis process included the holding of a Public Hearing in the city of Caçu, in April 2005, in which about six-hundred (600) people participated; an informative technical meeting in Goiânia, State of Goiás, with approximately eighty (80) people; and, in September 2005, another meeting in Goiânia to disclose the EIBH results, with the attendance of the Public Prosecutor's Offices, Brazilian Ministry of Mining and Energy, and Aneel.

EIBH concluded that a set of plants could have their environmental licensing process immediately retaken – among them Caçu and Barra dos Coqueiros HPPs –, provided that some recommendations for social and environmental actions were followed. For other plants, it was determined that further studies should be carried out so that the licensing process could continue.

In spite of that, by the exclusive decision of the entrepreneur of Caçu / Barra dos Coqueiros HPPs – at the time already Novelis do Brasil, as a result of a spin-off by Alcan – the licensing process of the two plants was not resumed immediately. The company chose first to update the Environmental Impact Assessment (EIA) and to develop a wide interaction process with the urban and rural communities in the region of the enterprise [6]. Those processes took place over a period of about six months, with two new Public Hearings carried out in late April 2006 in the municipalities of Caçu and Cachoeira Alta. The Preliminary License was then granted by AGMA to both HPPs at the beginning of the second half of 2006.

Subsequently, in April 2007, based on the assets sale of the two plants by Novelis, the concession of Caçu and Barra dos Coqueiros HPPs was transferred to

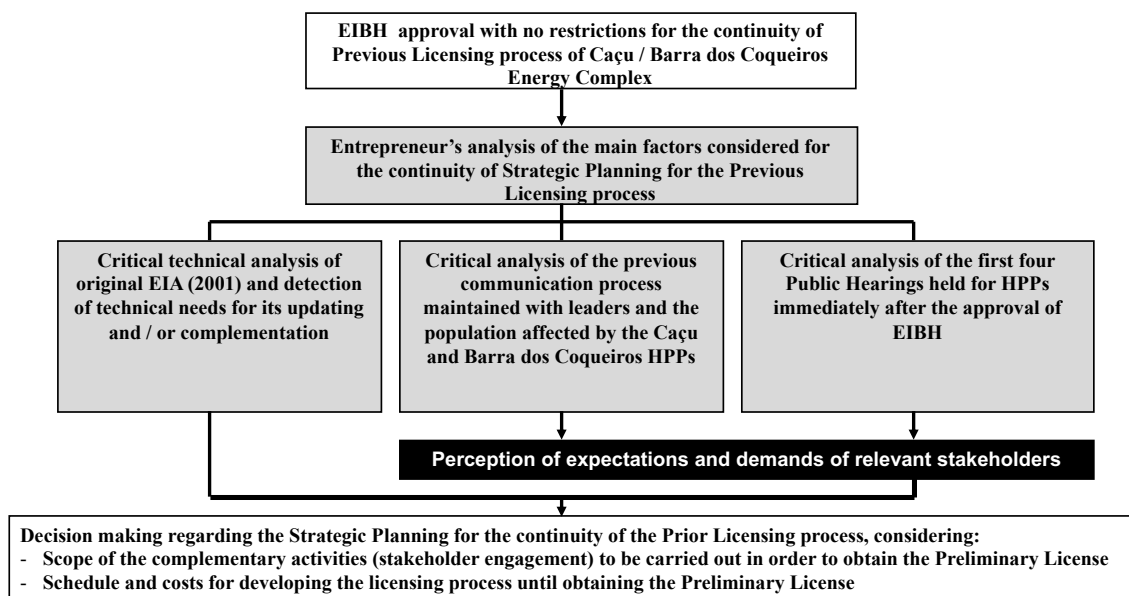
Gerdau Aços Longos S.A., which implemented them in the period from 2007 to 2010, having its operation started in July and June 2010 respectively. In July 2018, after a new sale of both plants, the concession was passed to Kinross Brasil Mineração S.A.

3. Results and Discussion

3.3 The development of the stakeholders' engagement process

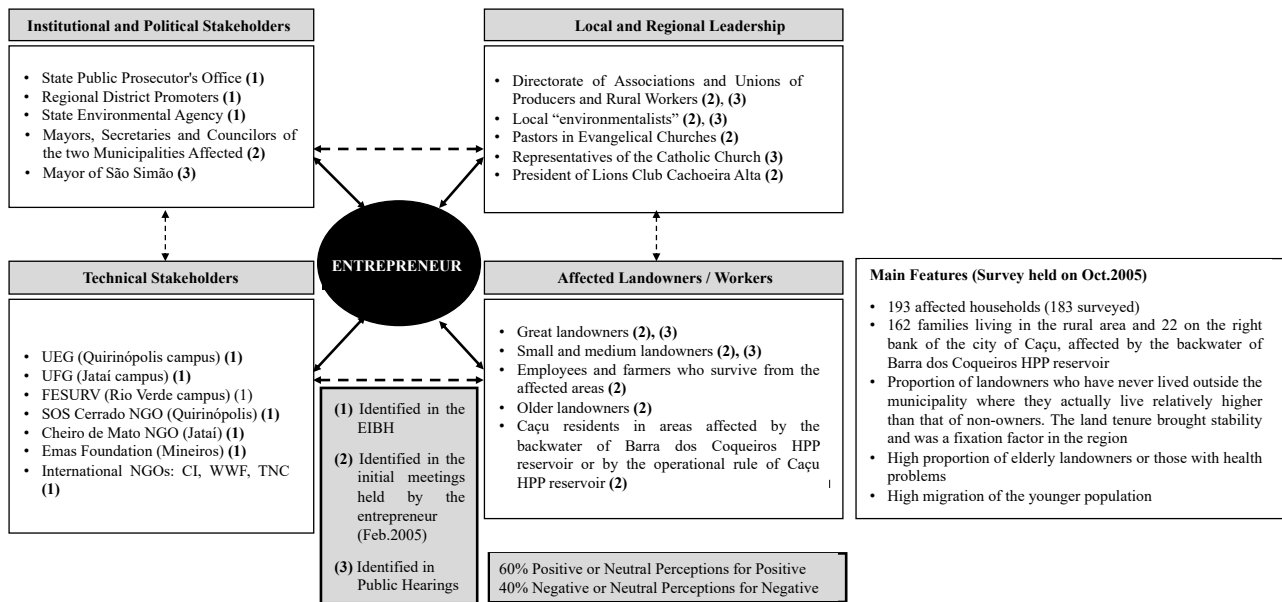
According to the EIA [6] and the performed interviews, Figure 3 summarizes the steps followed by the former entrepreneur of the Caçu / Barra dos Coqueiros HPPs that culminated in decision making to update / complement the EIA, as well as to deepen the engagement process with stakeholders.

Additionally, through the interviews conducted, it was possible to identify mapping of stakeholders resulting from the period prior to the update of the EIA, according to four identifies categories and their respective components (Fig. 4).



Source: Adapted from NOVELIS (2006)

Fig. 3 Flowchart of entrepreneur's decision-making to update the EIA and deepen the stakeholder's engagement process



Source: Adapted from NOVELIS (2006)

Fig. 4 Previous mapping of stakeholders to support strategic deepening engagement during the updating of the EIA

In addition to the perceptions gained during the development of the EIBH and the immediate resumption of the Public Hearings’ process for some of the other plants (Fig. 3), the planning and conduct of the process of deepening stakeholder engagement was

based on other strategic pillars. These pillars are individualized in Table 1, relating and justifying them in the light of the pre-selected SLO variables for analysis, as above.

Table 1 Strategic pillars of the stakeholder engagement process during the resumption of the previous licensing process of Caçu / Barra dos Coqueiros Energy Complex and its relationship with the SLO variables

Strategic Pillars	Analysis based on SLO Variables
Face-to-face involvement, in contact with leaders and affected communities, of the entrepreneur’s teams of the Socio-environmental, and Community Relations and Institutional Managements (supported by a team specialized in Social Communication, including to record all meetings)	<ul style="list-style-type: none"> a. <u>Quality of Dialogue</u>: this contact allows local and regional actors to hear from the entrepreneur's institutional representatives, and to discuss positive and negative positions with them regarding their demands and questions, as well as proposals for Cooperation Terms and socio-environmental actions b. <u>Minimizing Power Asymmetries</u>: due to the higher level of transparency required by the parties in face-to-face contact
Immediate start of updating the Socio-economic Registry with all affected landowners and workers, with open questions for the perception of impacts, and questions about expectations related to the project	<ul style="list-style-type: none"> a. <u>Quality of Dialogue</u>: the Socio-economic Registry team transforms himself into an effective agent of interaction with the population, capturing strategic information to support eventual complementary details of the studies, impact assessment, proposal of measures and negotiation criteria, as well as planning actions

To be continued

Table 1 Strategic pillars of the stakeholder engagement process during the resumption of the previous licensing process of Caçu / Barra dos Coqueiros Energy Complex and its relationship with the SLO variables

Strategic Pillars	Analysis based on SLO Variables	Conclusion
Sectorization of the areas affected by each of the HPPs (works and reservoirs) to support planning and implementation of community meetings, taking into account the geographic location, different socioeconomic characteristics of the population, and differences between potential impacts of the project on those communities	<ul style="list-style-type: none"> a. <u>Quality of Dialogue</u>: enabling meetings with a smaller audience gives greater possibility of direct interaction and specific approaches for each affected region relative to the project b. <u>Minimizing Power Asymmetries</u>: meetings with a smaller audience and a door-to-door mobilization encourages the participation, among others, of the older population (about 30% of the affected landowners) c. <u>Procedural Fairness Applied to Communities and Strategic Fields of Action</u>: discussion and legitimacy of strategic alliances are enabled in view of the specificities of each region and its communities 	
<p>Proposition and discussion with the affected population of the negotiation criteria during the prior licensing stage, within the scope of meetings held by sectors, as above</p> <p>To give ample publicity in the updated EIA [6] of the version of Negotiation Criteria previously discussed and formally agreed with the communities</p>	<ul style="list-style-type: none"> a. <u>Procedural Fairness Applied to Communities</u>: the transparent discussion of the indemnification and resettlement criteria is enabled with the population of each affected sector, based on the entrepreneur's initial proposal b. <u>Minimizing Power Asymmetries</u>: each member of the meeting, when participating in the joint discussion in his/her sector, is able to see him/herself as an effective participant in the construction of the Negotiation Criteria c. <u>Strategic Fields of Action</u>: publicizing, prior to each meeting, the changes in the entrepreneur's original proposal resulting from discussions and consensus in other sectors enables each "part" to become integrated into the "whole", increasing the "social cohesion" 	
Monthly report on the progress of the interaction process with the environmental agency and Public Prosecutor's Offices	<ul style="list-style-type: none"> a. <u>Quality of Dialogue</u>: effective transparency in the record and disclosure of the stakeholders' engagement process, allowing periodic field audits by these institutions 	

It should also be noted that the social and environmental impact assessment conducted for the purpose of updating / complementing the EIA [6] was directly fed by the result of the actions taken during the stakeholder engagement process. Thus, as pointed out by one of the interviewees for this research:

“[...] the socio-political-institutional aspect of the evaluation undertaken for the Caçu / Barra dos Coqueiros Energy Complex incorporated, in a process still often strictly conducted from a technical perspective, the variable of perception of the consequences of a given impact on the environmental

system. This perception considers the expectations and fears of the different groups of social agents existing in the region where the enterprise is located. Even though social agents often do not have the technical means to assess the magnitude of an impact, it is unquestionable that they can and should give their opinion on its importance. This is extremely significant because these agents will coexist with the new reality that will be configured in the region due to the construction and operation of the enterprise. So, they should have the right to be continuously heard and clarified whether or not their perception of an impact is consistent with the

situation that will materialize where they live or act in some way”.

4. Conclusion

By analyzing the results of the stakeholder engagement strategy put in place for the previous licensing of Caçu / Barra dos Coqueiros Energy Complex in the light of some performance indicators that provide shareholder value, we conclude that:

- a. the initial goal, admitted by the entrepreneur, of extending the deadline by approximately nine (9) months to obtain the Preliminary License after the EIBH approval was met, including the period necessary for elaborating the updating / complementation of the EIA and conducting the social interaction process;
- b. there were no externalities to the process arising from significant opposition demonstrations by relevant stakeholders, whether they are representations of the population and affected municipal public authorities, Non-Governmental Organizations (NGOs) or even the State and Federal Public Prosecutor's Offices, by means of Public Civil Actions. On the other hand, it is reiterated that the State Public Prosecutor's Office issued a formal statement favorable to the granting of the Preliminary License, prior to its effective issuance by AGMA. That statement bases on the institution's active monitoring of the entire process;
- c. the entrepreneur who conducted the prior licensing process had no difficulties, regarding the socio-environmental issues, in valuing his asset, considering, among other factors, that the process was recorded in detail in terms of interactions, negotiations and agreements signed with different stakeholders, providing it with due transparency so that potential stakeholders could carry out their due diligences to support proposals and decision making.

The fact that a version of the Negotiation Criteria, duly signed by representatives of different community

leaders and associations, was included in official documents and in a wide public domain represented an important condition to confer a potential security for the affected population, including the process of changing entrepreneurs after the granting of the Preliminary License.

In short, considering some key strategic variables of the SLO, it appears that the planning and implementation of stakeholder engagement succeeded in raising the prior licensing process of the Caçu / Barra dos Coqueiros HPPs minimally to the “Approval” level according to Thomson and Boutilier model [8] (Fig. 1a).

From the perspective of the model presented in Figure 1b, it is clear that this approval came from the recognition, at least by a large part of the stakeholders, of the economic and socio-political legitimacy that the project could bring for themselves and for the community region. And that this approval was based on trust in the interaction process developed by the entrepreneur with them. It is also possible, through the records and manifestations available from these stakeholders during the Public Hearings, to consider the achievement of a dimension of “institutionalized trust” in the entrepreneur, at least at the project stage corresponding to the Preliminary License issuance.

In these terms, we come to the conclusion that the prior licensing process of the Caçu / Barra dos Coqueiros Energy Complex added a set of factors that characterize it as a precursor case of successful practice of the Social License precepts, even before they gained breadth of discussion in Brazil for different productive segments. The forms of planning and conducting the process certainly led, at that stage of the enterprise's baseline, to shared values for both the entrepreneur and diverse stakeholders, especially those to be directly affected by the project. Besides that, this case study adds value to the hydroelectric power generation sector, as it brings strategies and relationship practices with stakeholders that can serve as references for other projects.

Finally, as contributions for the continuation of research associated with the Social License for the hydroelectricity sector, it is recommended to analyze the engagement process, for the Energy Complex on screen, throughout its installation licensing stage, implementation of the works and start of operation.

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Certainly, these studies will bring relevant contributions to the discussion about the dynamics and potential volatility of the SLO in the face of new visions and practices of relationship with stakeholders.