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Transboundary hydropower projects: allocation of competence and cooperation between the federation and its federating units in Switzerland

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(i) The Swiss Constitution places cantons (federating units) in charge of managing all water uses. At the same time, it gives the federation decision-making authority over transboundary water uses, including for hydropower purposes. (ii) It further mandates the Federation to consult and consider the concerns and interests of the affected cantons when deciding on transboundary hydropower projects. (iii) Aside from the possibility of intertwining competence between the Federation and cantons on the transboundary hydropower project, the situation creates ambiguity around the obligation to consult between parties on such projects. (iv) Cooperation in good faith in implementing relevant procedural rules of consultation between parties seems to be the most promising approach to finding solutions acceptable to all.

KEYWORDS

hydropower, Switzerland, energy transition, sustainability, net zero, constitutional law, transboundary hydropower projects, Federal system of governance

Introduction

Hydropower facilities play a substantial role in energy production in Switzerland. Approximately 60% of the energy production in Switzerland results from different types of hydropower plants: run-of-the-river, pumped storage, and storage. Apart from making up for a large share of energy production in Switzerland, pumped storage and storage hydropower are essential energy sources because of their availability in all seasons and during the daytime, when energy needs are high and/or other sources of energy production are low.

Transboundary hydropower facilities play a more substantial role in Swiss energy production. Two transboundary rivers, Rhine and Rhone, feed 607 of the existing 693 hydropower plants in Switzerland.¹ The global call to double the current global hydropower capacity by 2030² presents a significant opportunity for hydropower in a transboundary

1 Swiss Federal Office of Energy 2023, Large-scale Hydropower [Large-scale hydropower \(admin.ch\)](#).

2 International Energy Agency (IEA) 2021. Hydropower Special Market Report Analysis and Forecast to 2030.

context, even in Switzerland. In fact, it has been estimated that more than 70% of planned or under-construction hydropower projects fall under this category.³

As Switzerland promotes hydropower as a significant part of its energy transition, many new projects will likely be situated along transboundary rivers. With the hope of increasing substantial roles in the European electricity market (as a supplier and consumer), there are prospects for increased investment in hydropower projects situated along shared rivers with neighbouring European countries. However, such projects usually face multilayered and complicated legal regimes, even from a domestic law perspective.⁴

In Switzerland, transboundary hydropower plants raise more difficult questions because of the binational nature of such projects. On the one hand, the canton oversees all water uses in Switzerland. On the other hand, the Federation has decision-making competence regarding transboundary water uses, including hydropower. However, the Constitution further mandates that the Federation must consult and consider the concerns and interests of affected cantons when deciding on transboundary hydropower projects.

This situation raises two complementary challenges. On the one hand, it raises the question of the intertwined competences between the Federation and its units in the development of transboundary hydropower projects. On the other hand, it raises the issue of the extent of the obligation of the Federation to consult canton/s when deciding on such projects. Applying the concept of cooperation as a solution to these challenges, this study explored the allocation of competence between parties and the contour of the obligation to consult between them on the development of the transboundary hydropower project.

Analysis of relevant legal framework

In Switzerland, freshwater systems (including water along borders) and their uses are generally managed by the cantons. This is because the canton is closer to the people. The authority of the cantons in Switzerland to manage water resources includes charging levies for their uses. According to Article 76 (4) (Water) of the Federal Constitution of Switzerland,⁵ ‘The Cantons shall manage their water resources. They may levy charges for the use of water.’

On the other hand, the Constitution gives the Federation decision-making powers regarding the use of transboundary water resources, including hydropower. This makes sense as the use of transboundary waters usually requires inter-state agreed solutions. In such a case, the national responsibility for the corresponding negotiation and conclusion of the state treaty lies with the Federal state. These

provisions are also consistent with the exclusive competence of the Confederation in international affairs as per Article 54 of the Constitution (see text footnote 5), especially as questions of demarcation are usually central to the generated energy share and concession fees for transboundary hydropower projects.

It is clear from the preceding analysis that several constitutional provisions and other relevant laws empowered the Federation to decide on the uses of transboundary water, including hydropower projects. However, the canton oversees general water use in Switzerland. In this situation, it can be interpreted that the competence of the federation over the transboundary waters is a ‘lex specialis’ regime compared to the competence of the canton over the general water uses in Switzerland. Hence, the expressly stipulated special rule takes precedence over the general one.

The Constitution, however, mandates the Federation to consult and take into the concerns of the canton affected by the development and operation of the transboundary hydropower project. According to Article 76 (5) (6) of the Constitution (see text footnote 5), ‘the Confederation, in consultation with the Cantons concerned, shall decide on rights to international water resources and the charges for them.’ According to Article 76 (6) of the Federal Constitution (see text footnote 5), ‘The Confederation shall take account of the concerns of the Cantons where the water originates in fulfilling its duties.’ This is consistent with the general obligation Article 56 of the Federal Constitution (see text footnote 5), which requires the Federation to ‘safeguard’ the interest of the cantons in its foreign policy and take their competences ‘into account’.

In addition to the Federal Constitution, the Federal Act on the Exploitation of Hydropower⁶ provides for cooperation between the Federation and the cantons in the development of transboundary hydropower projects. The Act requires the Department of the Environment, Transport, Energy, and Communication (DETEC) of the Federation—the sole authority for granting the right to use transboundary waters—to consult with the cantons in the awarding of concessions for the uses of transboundary waters.⁷ The Act confirms that DETEC grants corresponding concessions and determines the fees to be paid for them—after all, ‘after consulting the cantons involved and in good consideration of their legislation.’⁸ The cantonal law must only be taken into account ‘insofar as it does not disproportionately restrict the concessionaire (Federation) in the performance of his duties.’⁹

The Federal Court has had opportunities to decide on the allocation of competence and cooperation between the Swiss Federation and the canton for the development of transboundary hydropower projects. In its first intervention, it states that if the granting or exercise of the right to water resources concerns international relations, the Federation should decide on this with the involvement of the cantons involved ... The provision authorises the federal authorities to make decisions on the right to international water, which, in themselves, would fall within the competence of the cantons under Article 24 Paragraph 3 (or Article 76 (4) of the Federal

3 Llamosas C. and Sovacool B (2021). Transboundary Hydropower in Contested Context: Energy Security, Capabilities and Justice in Comparative Perspective, *Energy Strategy Reviews* 37.

4 For international law perspectives, see Rieu-Clarke (2015), *Transboundary Hydropower Projects Seen Through the Lens of Three International Legal Regimes: Foreign Investment, Environmental Protection and Human Rights*, 3(1) *International Journal of Water Governance*; Tanzi (2016), *International Law and Foreign Investment in Hydroelectric Industry: A Multidimensional Analysis*, *International Community Law Review* 18 (183–222).

5 Federal Constitution of the Swiss Federation of 18 April 1999.

6 Of 22 December 1916 (Hydropower Act).

7 Of 22 December 1916 (Hydropower Act), Art. 7.

8 Of 22 December 1916 (Hydropower Act), Art. 52.

9 Of 22 December 1916 (Hydropower Act), Art. 62 (4).

Constitution).¹⁰ In another decision, the Court states that ‘Even if (according to Art. 76 sec.5 and Art 7 and 38 WRG), the Federation decides ... the Federation acts in the interest of the cantons concerned.’¹¹ The Court further declared that the Federation acts as a representative of the canton, must seek their opinion, and is obliged to safeguard their interests.¹²

From the preceding, it appears that the competences of the Federation vis-à-vis the canton on transboundary hydropower projects are less ambiguous than their obligation to consult on deciding on such projects. This situation raises the question of how the Federal State dispenses its obligation to consult and safeguard the interests of the affected canton in developing transboundary hydropower projects. The Constitution does not define how to guarantee this obligation. One of the best ways to achieve this is through cooperation between the Federal State and the affected canton regarding the development of transboundary hydropower. However, the practice of cooperation between the Federal State and its units is not new. In fact, one of the hallmarks of the Swiss Constitutional arrangement is the ‘principle of cooperative federalism.’¹³

One of the ways to implement ‘cooperative federalism’ in this case is through the participation of the affected canton in the decision-making of the Federal State on transboundary hydropower projects. However, the procedural steps involved in such participation need to be clarified. Few constitutional provisions provide procedural rules for the participation of the canton in the decision-making process of the Federal States. The Constitution also provides for the Federation to inform and consult the cantons, allowing them to participate in decision-making whenever their interests are affected.¹⁴

In making foreign policy, the Constitution provides few guidelines on the participation of cantons in the decision-making of the Federation.¹⁵ In this regard, provisions are self-explanatory. Therefore, these provisions are replicated below:

- i Cantons can participate in the preparation of foreign policy decisions concerning their competences or essential interests.
- ii The Federation should inform cantons in good time and in a comprehensive manner and obtain their opinions.
- iii The opinions of the cantons are of particular importance if they are affected in their competence. In such cases, the cantons can participate in international negotiations in an appropriate manner.

The Federal Act on the Involvement of Cantons in Foreign Policy also repeats some of the above principles but provides additional information about the cooperation between the cantons and the Federation. It provides that the Federation must consult the cantons independently of a consultation policy.¹⁶ This means that the obligation to consult the canton state or permit their participation in decision-making subsists in transboundary hydropower projects, even when an existing consultation policy does not explicitly include such consultation.

Similar to the provision under the Constitution,¹⁷ the Federal Act also posits that only cantons who are potentially affected—have the competence or essential interests—in the subject matter of foreign affairs have the right to consultation or participation in the decision-making process.¹⁸ In this case, all cantonal interests that are not only insignificantly related to their competence must be regarded as essential. Their interests can arise as beneficiaries of licencing, concessionary fees, and water charges or levies for such projects. They also have an interest in the impact of hydropower activities on their environment or ecosystems. Additionally, they have a legitimate interest in benefiting from the energy produced by hydropower in their territory. Their interests may also be related to their influence on the enforcement or implementation of decisions concerning transboundary hydropower projects.¹⁹

As a general rule, the interest of affected cantons is seen as substantial or essential as the cantons are generally in charge of water uses. However, the fact that the essential interests of the canton are at stake does not entitle them to participate in negotiations. Thus, the determination of the level of consultation or participation of the cantons likely depends on a case-by-case basis, especially in the context of their involvement in intergovernmental negotiations. The more critical, far-reaching, and contentious the matter is, the stronger the interest of the concerned canton should be soothed or taken into account in intergovernmental negotiations.²⁰ For instance, matters of the considerable economic advantage of the canton, such as the question of a new plant, dismantling without replacement, or the complex relapse or repurchase of an existing plant, will require more intensive involvement of the concerned canton.

According to the constitutional provision, consultation should happen in ‘good time’, which leaves room for manoeuvre. Under certain circumstances, it may be appropriate for parties to agree on when to commence consultations. It should be pointed out if the consultations are in the context of intergovernmental negotiations.²¹ If this is the case, consultation should also occur before intergovernmental negotiations. In general, the concerned canton must be consulted, at least in such a way that its statements can be combined and weighed with other information and then introduced into the intergovernmental negotiations.²²

In terms of content, the information must be comprehensive and detailed, regardless of its possible confidentiality. In return, the canton must ensure the confidentiality of the information.²³ The medium of exchange of information, written information, or transmission of the relevant document should be the rule, if necessary, supplemented by conference exchanges.²⁴ The Federation is also required to inform the affected canton/s of the relevant reasons for deviating from the cantonal position.²⁵ The canton must always be kept up-to-date with negotiations so that it can react to new circumstances and be heard accordingly (see text footnote 24).

10 Judgement 2A.179/2000 of 4 December 2012 E. 2.a.

11 Judgement 2C_338/2013 of 21 August 2013 E. 2.2.

12 BGE 40 I 530S. 549.

13 Art. 44 et seq of the Federal Constitution.

14 Art. 44 et seq of the Federal Constitution, Art. 45.

15 Art. 44 et seq of the Federal Constitution, Art. 55.

16 Art. 44 et seq of the Federal Constitution, Art. (2).

17 Art. 45, 55 (2) of the Federal Constitution.

18 Canton Involvement Act, Arts 4 and 5.

19 Canton Involvement Act, Art. 1 (2).

20 Canton Involvement Act, Art 4 (3).

21 Canton Involvement Act, Art. 5.

22 Canton Involvement Act Art. 3 (2), see also Art. 55 (2) Federal Constitution.

23 Canton Involvement Act Art 6.

24 Canton Involvement Act.

25 Canton Involvement Act Art. 4 (3).

Another issue is whether the affected, interested, or concerned cantons have the right to participate in international intergovernmental negotiations on transboundary hydropower projects. It depends on whether the canton shares competence with the Federation in the use of transboundary rivers for hydropower, which is not the case. The relevant Federal Act gives the Federation exclusive rights over decision-making on transboundary hydropower projects.²⁶ The fact that the essential interests of the canton are at stake does not entitle them to participate in the negotiations. This does not mean that the Federation cannot or should not involve the canton if it deems it fit or necessary. For instance, the involvement of cantonal representatives in the discussions with the negotiating partner may be appropriate if deviations from the cantonal positions are due for negotiation.²⁷

According to the Act, the Federation should publicly announce its upcoming decisions so that the potentially affected canton can claim its right to consultation or participation in decision-making. Hence, the cantons 'request' for participation in decision-making.²⁸ However, the Federation does not have to wait to receive such a request from the canton; it can initiate a consultation or request the participation of the canton. It also states that the announcement or notification should provide real-time, comprehensive, or sufficiently precise information about the upcoming project.²⁹

The federal law gives priority to the capacity of Federal States to decide on foreign policy over cantonal participation in decision-making. It makes it clear that the 'participation of the Cantons ... must not impair the Federal Government's ability to act in foreign policy.'³⁰ This also means that the canton cannot veto the decision of the Federation during their participation in the decision-making process if they disagree. This is reasonable because the cantons do not necessarily have competence in the matter; their participation is usually at the benevolence of the Federation. However, it will be counterproductive for the Federal State to act recklessly in disregard of the concerns of the canton as the ability of the former to act in foreign policy depends on domestic political consensus. Moreover, it is difficult for the Federation to disregard the interests of the cantons, which are widely shared with the majority in Switzerland.

Additional guidance on participation is provided under Article 62 of the Hydropower Act. The provision deals with procedures for the concession of transboundary hydropower projects under the Federal Authority of the Department of Environment, Transport, Energy, and Communications (DETEC). According to this provision, an application for a concession must be made public—the affected canton must be requested to comment within 3 months of the notice. This procedure provides the opportunity for the affected cantons to engage with the Federation even if they had not been consulted before the notice. This provided an objective procedure. However, the objection procedure only mentions affected communes (the tier level of government) and not the cantons, which may make it difficult for the latter to utilise it directly.

26 Hydropower Act, Arts 7, 62.

27 Canton Involvement Act, Art. 4 (3).

28 Hydropower Act, Art 4 (1).

29 Hydropower Act, Art. 3(1-2).

30 Canton Involvement Act, Art. 1(3).

Conclusion

The Swiss Constitution framework provides a nuanced distribution of competence between the Federation and its Federation Units in the development of transboundary hydropower projects. It also creates an ambiguous regime of cooperation between the Federation and the cantons on such projects, which leaves considerable room for manoeuvre for the former. This situation creates the possibility of disputes between parties; for instance, if a canton/s feels that their right to be consulted is ignored or insufficiently explored. The two relevant federal legislations do not provide a particular legal recourse for such disputes between the Federation and the canton. The Swiss Constitution generally tries to avoid an adversarial approach to resolving such disputes; instead, it requires parties to settle 'as far as possible through negotiation and mediation.'³¹

Otherwise, disagreements between the Federation and the canton are only litigated through the Supreme Court.³² However, litigation against the Federation may be meaningless based on the apparent exclusive competence of the Federation in decision-making on transboundary hydropower projects. Moreover, federal acts and treaties are not subject to constitutional control by the courts in Switzerland if federal authorities act on a clear basis under statutory law. Given the political nature of such matters, the Federal Supreme Court may impose great restraint on how to deal with them.

Cooperation in good faith between federal and cantonal levels is usually the most promising approach for finding solutions acceptable to all. For a starter, the Federation and the cantons may want to cooperate to clarify the outstanding procedural steps regarding participation in decision-making regarding transboundary hydropower projects. Nonetheless, the federal authorities in charge of the decision-making or involvement of the canton in the process still face considerable challenges. They must find a solution that is acceptable to the neighbouring state, the jointly mandated private or private-public plant operator, and the domestic interests represented by the cantons.

Author's note

A more detailed analysis of the issues under this policy brief, consult *Abegg and Reto, (2023). Grenzwasserkraft—Gehalt und Grenzen des ausserpolitischen Zusammenwirken von bund und Kantonen* Dike Verlag, Zurich. Schriften zum Energierecht; 27. ISBN: 978-3-03929-026-0. Available at: <https://doi.org/10.3256/978-3-03929-026-0>. The author thanks the Professor Andreas Abegg and Dr. Reto Walther for their generous comments on the initial versions of the this article. He will also like to thank the editor and reviewer of this article for their excellent work.

Data availability statement

The original contributions presented in the study are included in the article/supplementary materials, further inquiries can be directed to the corresponding author.

31 Federal Constitution, Art. 44 (3).

32 Federal Constitution, Art. 189 (2).

Author contributions

CE: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Writing – original draft, Writing – review & editing.

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