

INDUS WATERS WESTERN RIVERS ARBITRATION

(ISLAMIC REPUBLIC OF PAKISTAN V. REPUBLIC OF INDIA)

PARTLY DISSENTING OPINION

H.E. Judge Awn Shawkat Al-Khasawneh

Scope of disagreement

1. I am in general agreement with much of what the Award contains. A prime and important example is the treatment in Part X of low-level outlets, gated spillways and power intakes. Here, the Court not only confirmed the findings of the *Kishenganga* Court. It also imported greater precision into the prohibitions and constraints contained therein. In doing so, it contributed to furthering what must be a central objective of the Indus Water Treaty (the “Treaty”), namely “fixing and delimiting ... the rights and obligations of each [Party] in relation to the other concerning the use of these waters”.
2. By contrast—and I say this respectfully but firmly—I consider the Majority's reasoning in Part XI regarding maximum Pondage to be fundamentally misconceived as a matter of the interpretation of treaties under international law and the consequent finding at para. 811(O)(2)¹ to be unfounded, as shall be presently explained in this Partly Dissenting Opinion appended to the Award.
3. Before proceeding to do so, I note that, following my decision to write a dissent after the end of deliberations, my dear and learned colleague Professor Minear decided to write separately a “concurring” opinion. In itself, this is unassailable. The annals of judicial decisions and arbitral awards are replete with similar examples.

However, this “concurring” Opinion was unlike anything that I had come across in my professional career. Normally, separate and concurring opinions fulfil the function of signaling agreement with the majority but on different grounds from those marshalled by them or, less

¹ In particular, para. 811(O)(2)(ii) provides that (ii) “‘Pondage required for Firm Power’ shall be calculated based on a realistic projection of the proposed HEP’s installed capacity and anticipated load, reflecting the fluctuations in the discharge of the turbines arising from variations in the daily and weekly loads of the plant, as set forth in Paragraph 2(c) of Annexure D.”

frequently, highlighting an argument that did not receive enough attention in the estimation of the writer of a separate and concurring opinion. Professor Minear's Concurring Opinion is novel. In content, it is bereft of new reasoning, consisting entirely of the repetition and rehashing of arguments already deployed by the Majority of whom my distinguished friend is a part, and in purport – from beginning till end – in critiquing my Dissenting Opinion. This is perhaps most clearly reflected in Professor Minear's conclusion that he is “unpersuaded by [the] Partial Dissent, and [that he] concur[s] without reservation in the Court's Award” (Concurring Opinion, para. 36). I have grave doubts about the novelty, and indeed usefulness, of concurring with oneself, even with the addition of the words “without reservation”, which, in the present instance, amounts to no more than an inadvertent admission that the reasoning in the Award is weary and needs to be buttressed by repetition, in the hope that, as once put by Algernon Swinburne, “even the weariest river winds somewhere safe to sea.”²

I am compelled against my inclination to respond to some of the points raised by my distinguished colleague, although the Majority Award and Professor Minear's nominally “Concurring” Opinion accord with each other almost completely. To minimize repetition, I shall refer to my learned colleague's Opinion only when needed.

4. As a final prefatory point concerning the scope and subject-matter of the disagreement, it is worth noting that the matter is indeed an important one. The Majority suggest—and Professor Minear emphasizes—that the matter “pales in importance compared to the location of a reservoir's outlets, spillways, and intakes discussed in Part X” (Concurring Opinion, para. 6; see also Award, paras. 532–534). Even if this is indeed the case as regards concerns relating to the weaponization of water, that does nothing to detract from the significance of the matter in its own right. This is so as a matter of principle in terms of ascertaining the common intention of the Parties by due regard to the ordinary meaning of the terms and the other elements relevant under the rules on treaty interpretation. Also, as regards concerns about India's weaponisation of the waters of the Western Rivers, the presence of more concerning aspects relating to the HEPs (Award, para. 534) is not to be equated with the absence of any impact on weaponisation, especially in light of the considerable number of hydro-electric plants (“HEPs”) planned and under construction. Indeed, the Majority appear to have had no regard to Pakistan's indication that a flawed approach to maximum Pondage being applied “to scores of Western River HEPs, or to a cascade of HEPs on the same river” could have “potentially catastrophic” consequences for Pakistan.³

² A.C. Swinburne, ‘The Garden of Proserpine’ in *The Poems of Algernon Charles Swinburne: Poems and Ballads – First Series* (Heinemann 1917) 172.

³ Pakistan's Post-Hearing Submissions, para. 2.106.

The main question on maximum Pondage

5. The question of maximum Pondage for Annexure D, Part 3, HEPs arises in relation to India's permitted use of the Western Rivers for the specific purpose of generating hydro-electric power, *as an exception* to its "let flow" obligation under Article III of the Treaty. It is undisputed that Paragraph 8(c) of Annexure D of the Treaty regulates maximum Pondage for Annexure D, Part 3, HEPs (excluding Small Plants, which are regulated by Paragraph 18 of Annexure D).
6. According to Paragraph 8(c), "[t]he maximum Pondage in the Operating Pool shall not exceed twice the Pondage required for Firm Power." In examining what precisely this provision permits, the Court finds itself essentially between two interpretations, diverging principally on whether maximum Pondage relates solely to the hydrological conditions at the site of a particular HEP or extends to the ability to meet the anticipated load of a HEP with a particular installed capacity (Award, para. 662⁴). In other words, the main question arising for the Majority in respect of Paragraph 8(c) of Annexure D is whether the anticipated load of a particular HEP and the installed capacity of that HEP are determinants of maximum Pondage. The Majority consider that this is indeed the case, with the Award providing that "Pondage required for Firm Power shall be calculated based on a realistic, well-founded, and defensible projection of the proposed Annexure D, Part 3, HEP's installed capacity and anticipated load, reflecting the fluctuations in the discharge of the turbines arising from variations in the daily and weekly loads of the plant" (Award, para. 747(b)⁵).

The text of Paragraph 8(c)

7. To reach this finding, the Majority rightly commence from Paragraph 8(c). They consider that the interpretation of Paragraph 8(c) is "informed by the ordinary meaning to be given to its text", seemingly just as much as it is by various other considerations (Award, para. 655⁶). But in

⁴ "The definition in Paragraph 2(i) of 'Firm Power' as 'corresponding' to the 'minimum mean discharge' could accommodate Pakistan's interpretation, which views the volume of Pondage as that required to operate a run-of-river plant at 'Firm Power' during any day in which the stream flow falls below the MMD of the river. However, the definition in Paragraph 2(c) of 'Pondage' ... could just as easily accommodate India's interpretation, which views the volume of Pondage as that 'required' to operate a run-of-river plant, with a prescribed installed capacity, to meet that plant's anticipated load over the course of a day or seven-day period when the river is flowing at the MMD."

⁵ "Pondage required for Firm Power shall be calculated based on a realistic, well-founded, and defensible projection of the proposed Annexure D, Part 3 HEP's installed capacity and anticipated load, reflecting the fluctuations in the discharge of the turbines arising from variations in the daily and weekly loads of the plant, as set forth in Paragraph 2(c) of Annexure D."

⁶ "[T]he interpretation of Paragraph 8(c) is necessarily informed by the ordinary meaning to be given to its text. That text, in turn, is informed by the Treaty's definitions for three of its terms When interpreting such text and definitions, consideration must be given as to whether the Parties intended to give a 'special

addition to being the starting point of any treaty interpretation, the ordinary meaning of the terms of the treaty may well be the end point. It is generally the text of a treaty that best reflects the agreement of the parties to that treaty, in this case India and Pakistan, as arduously negotiated by them, and it is not for the Court or anyone else to modify or supplant the rights and obligations agreed by them. Having sufficient regard to the text of a treaty thus serves to ensure that the parties are accorded the rights and obligations agreed by them. For this reason, as the International Court of Justice (“ICJ”) has put it, “[i]nterpretation must be based *above all* upon the text of the treaty” (*Territorial Dispute (Libyan Arab Jamahiriya/Chad)*, *Judgment*, *I.C.J. Reports 1994*, p. 22, para. 41 (emphasis added)).

8. Paragraph 8(c) of Annexure D provides that “[t]he maximum Pondage in the Operating Pool shall not exceed twice the Pondage required for Firm Power”. Paragraph 2(i) of Annexure D defines “Firm Power” as “the hydro-electric power *corresponding to the minimum mean discharge at the site of a plant*” (emphasis added). The plain meaning of the relevant terms thus makes abundantly clear that the maximum Pondage shall not exceed twice what is required to generate power when the flow of water is equal to the minimum mean discharge at the site of the HEP in question. Indeed, the Court accepts that this understanding as to maximum Pondage accords with the above provisions, which can be understood to allow for the volume of Pondage “required to operate a run-of-river plant at ‘Firm Power’ during any day in which the stream flow falls below the MMD [minimum mean discharge] of the river” (Award, para. 662) or, to be more precise, twice that. In this sense, Pondage would serve to ensure a rate of production and in this way perfectly accords also with the definition of Pondage as “Live Storage of only sufficient magnitude to meet fluctuations in the discharge of the turbines arising from variations in the daily and the weekly loads of the plan”, as per Paragraph 2(c). *This self-evident and clear interpretation of maximum pondage is all that the Court needed. “That is all ye know on earth, and all ye need to know”.⁷*

meaning’ to these terms that differs from their ordinary meaning. Further, the ordinary meaning of Paragraph 8(c) is informed contextually by other provisions of Annexure D (notably Paragraphs 9 and 15 and Appendix II) and other parts of the Treaty (notably Annexure E). Moreover, the ordinary meaning of Paragraph 8(c) is to be interpreted in light of the object and purpose of the Treaty. This interpretive process also benefits from consideration of the practice of the Parties since the adoption of the Treaty, which might either establish an agreement of the Parties as to interpretation of Paragraph 8(c) or at least confirm a meaning resulting from the initial elements of interpretation. The Court has also consulted the negotiating history of the Treaty, which provides limited but useful supplementary means for confirming the interpretation of Paragraph 8(c).”

⁷ J. Keates, ‘Ode to a Grecian Urn’ in A. Quiller-Couch (ed), *The Oxford Book of English Verse, 1250-1900* (Clarendon 2021) 730.

Constructed ambiguity on maximum Pondage

9. The Majority nevertheless place considerable emphasis on the definition of “Pondage” in Paragraph 2(c) of Annexure D to introduce ambiguity in what is otherwise patently clear as to maximum Pondage for Annexure D, Part 3, HEPs. It is not apparent why this definition—which simply clarifies the *purpose* of Pondage for Annexure D, Part 3, HEPs i.e. the generation of hydro-electric power, specifically in being used to meet fluctuations in the discharge of the turbines arising from variations in the daily and weekly loads of the plant, and not for example agricultural or consumptive uses—creates ambiguity as to whether the Pondage required for Firm Power “is oriented to the flow of the river [or] to the power demand of the HEP” (Award, para. 662). The Majority suggest that, if paragraph 8(c) of Annexure D is understood as allowing twice the volume of Pondage that is required for the power corresponding to the minimum mean discharge at the site of a plant, a temporal question remains in order to calculate maximum Pondage (Award, para. 675); there is no separate “unanswered key ... question[]” despite what Professor Minear suggests, as there is no difficulty in translating flow of water into volume, in turn giving rise to certain “power” (Concurring Opinion, para. 11).
10. The Majority appear to give some prominence to this temporal point in ascertaining the ordinary meaning of Paragraph 8(c). In particular, without engaging in any real detail with the question, the Majority somehow conclude that the answer to such a temporal question could not be “inferred from provisions other than Paragraph 8(c) and its definitions” and that this is a reason not to adopt the simpler approach to the ordinary meaning of Paragraph 8(c) (Award, para. 675). Moreover, the Majority express concern about one of the two possibilities on this temporal question allowing for considerable Pondage as a reason not to adopt the straightforward approach of understanding maximum Pondage as determined by the hydrology at the site of a particular HEP (Award, para. 675). This is especially surprising in the light of the limited concern that the Majority subsequently show to the considerable (and greater) maximum Pondage to which its approach gives rise (e.g. Award, para. 704).
11. Ultimately, instead of proceeding to examine this specific and limited temporal point (which does not detract from the general textual clarity that the Majority and Professor Minear in his Concurring Opinion do not see), the Majority identify and then seek to resolve the constructed “ambiguity” on the fundamental point of whether “required for Firm Power” indeed refers to “Firm Power” as expressly defined in the Treaty, or instead to the HEP’s installed capacity and anticipated load. They do so by having regard to certain aspects that may well be relevant to the exercise of treaty interpretation, including the context of the relevant terms, the object and purpose

of the treaty, the subsequent practice of the Parties, the *travaux préparatoires*, and the analogy with small plants, but they do not do so satisfactorily.

The importance of the object and purpose

12. Notable in this regard is the Majority's inadequate regard to the Treaty's object and purpose. The Award does acknowledge that "address[ing] the vulnerability of Pakistan as the downstream riparian of a critical but shared natural resource, as a means of promoting long-term cooperation and concomitantly of preventing serious conflict between the two States" is "an element of the object and purpose of the Treaty" (Award, para. 425). Additionally, the Court in the present case refers to the finding by the *Kishenganga* Court that a primary objective of the Treaty is "to limit the storage of water by India on the Western Rivers".⁸ Further, the Award acknowledges that an express objective of the Treaty is the "fixing and delimiting" of the rights and obligations of the Parties and that this reflects the nature of the Treaty, akin in significance and permanence to a boundary treaty (Award, para. 430⁹) (this is evidenced also in the Treaty's permanent character in not providing for its suspension or termination or for denunciation or withdrawal therefrom). As the ICJ has said, a primary object of such treaties is the achievement of "stability and finality" (*Case concerning the Temple of Preah Vihear (Cambodia v. Thailand), Merits, Judgment of 15 June 1962, I.C.J. Reports 1962, p. 34*). Moreover, the Court accepts that an additional objective of the treaty is its provision of a framework for "effective dispute settlement to clarify and resolve any uncertainties that might arise as between the Parties" (Award, para. 429).
13. Notwithstanding all of these aspects of the object and purpose of the Treaty, these elements receive scanty—if any—consideration by the Majority in their reasoning on the question of maximum Pondage (Award, paras. 701–707). For example, the objective of "limit[ing] the storage of water by India on the Western Rivers"—which bears self-evident relevance to the question of maximum Pondage—is not once considered by the Majority. The same can be said in respect of the objective of clarifying and resolving uncertainties that arise between the Parties. This is so despite the Majority expressly opting against the approach that would, as they accept, "eliminate any possibility of 'manipulation' by India" and that "could significantly reduce ... the prospects for future disputes". Instead, they opt for an approach that, in their own words, "results in some greater uncertainty" and under which India retains "discretion", not to say ability to manipulate the calculation of maximum Pondage (Award, para. 705). (While Professor Minear suggests that

⁸ *Indus Waters Kishenganga Arbitration (Pakistan v India)*, PCA Case No. 2011-01, Partial Award, 18 February 2013, para. 504.

⁹ "As suggested by Pakistan, from Preamble to final provisions, the Treaty possesses an objective that is akin, in significance and permanence, to a boundary treaty."

the Court gives due regard to the object and purpose elsewhere, referring specifically to paragraph 681 of the Award (Concurring Opinion, para. 16, footnote 24), in that paragraph the Court merely notes that a separate provision of Annexure D is consistent with the object and purpose of the Treaty – as if there could be a question that a provision whose interpretation is clear and undisputed is not consistent with the object and purpose.)

14. The Majority’s failure to have sufficient regard to the object and purpose of the Treaty is reflected also in the fact that its approach accords with that of the Neutral Expert in the *Baglihar* proceedings (to which the constructed ambiguity on Paragraph 8(c) relates¹⁰), although the Neutral Expert’s determination carries no interpretative weight in these proceedings, as the Majority, including Professor Minear, also accept (Award, para. 365; Concurring Opinion, para. 15, footnote 23). Specifically, the Neutral Expert’s approach to maximum Pondage was informed by the position that “pondage should be as large as possible”.¹¹ Regardless of the Majority’s reasoning, it is difficult to see how a result that yields the same result as one that seeks to maximize Pondage adequately addresses the vulnerability of Pakistan and serves the objective of limiting India’s storage of water on the Western Rivers. It suffices here to recall the words of the late John Briscoe (a renowned environmental engineer with considerable and internationally-recognized expertise on water management) on the Neutral Expert’s approach (which reflects that of the Majority), that it ultimately leaves “Pakistan without the mechanism – limited live storage – which was its only (albeit weak) protection against upstream manipulation of flows in India”.¹²
15. Furthermore, it is well-nigh impossible to see how an approach to maximum Pondage predicated primarily upon India’s energy demand—demand which may well affect the anticipated load on its HEPs—contributes to stability or finality. Indeed, this case was brought against the background of concerns “about India’s plan, via the ambitious HEP construction programme..., to turn the Indus River System into a ‘major power generation hub for north India’”;¹³ and India’s energy demand is on the rise, set to increase by 35% within the next decade alone.¹⁴
16. Regardless of growth in energy demand, load demands are variable and it is difficult for Pakistan to assess reliably the relevant information. Connectedly, in treating installed capacity and

¹⁰ See, for example, Award, para. 631.

¹¹ **PLA-0002**, *Baglihar Hydro-electric Plant (Pakistan v. India)*, Neutral Expert Determination on the Baglihar Hydro-electric Plant dated 12 February 2007, p. 103.

¹² **P-0325**, J. Briscoe, “War or Peace on the Indus”, *The News International*, 3 April 2010, p. 1.

¹³ Pakistan’s Memorial (First Phase) (22 March 2024), para. 5.23.

¹⁴ International Energy Agency, *World Energy Outlook 2024*, available at [iea.blob.core.windows.net/assets/02b65de2-1939-47ee-8e8a-4f62c38c44b0/WorldEnergyOutlook2024.pdf](https://www.iea.blob.core.windows.net/assets/02b65de2-1939-47ee-8e8a-4f62c38c44b0/WorldEnergyOutlook2024.pdf), p. 277.

anticipated load as determinants of maximum Pondage, the Majority can ask India for no more than a “realistic, well-founded, and defensible projection of the proposed Annexure D, Part 3, HEP’s installed capacity and anticipated load” (Award, para. 747(b)). In so doing, the Majority all but acknowledge the considerable discretion they leave to India in respect of, and the limited ability they leave for Pakistan to challenge, a key element for calculating maximum Pondage. In this regard, one may wonder about the lack of an objective and verifiable yardstick against which India’s projections are assessed to be “realistic, well-founded and defensible” and whether these are matters for India itself to determine. In leaving these matters unsettled, the Majority appear to be inviting further disputes between the Parties on a matter that the present case ought to resolve. The Majority acknowledge as much, satisfying themselves that the Parties can later seek to resolve such questions “through the Treaty’s dispute resolution procedures” (Award, para. 743). For the Parties to have arrived at the Court with a question on how to calculate maximum Pondage and to have left with other questions created by the Majority as to how to calculate maximum Pondage hardly seems to contribute to the effective settlement of a dispute between them. While, moreover, the Majority, including Professor Minear, treat as analogous the discretion left to India here and the “engineering judgment” required elsewhere, for example with respect to outlets, spillways and intakes (Concurring Opinion, para. 19; see also Award, para. 705), the difference between what is “realistic, well-founded and defensible”, on the one hand, with what is “necessary” or what accords with “best practices”, “internationally-recognized standards” and the like, on the other hand (see e.g. Award, para. 811 (G), (H)(2)(ii), (H)(3)(ii), (I)(2), (K)(2), (M)(2), (Q)), speaks for itself.

17. In light of all this, a serious question arises as to whether the Majority’s approach *effectively undermines* the object and purpose of the Treaty. More specifically, in adopting a methodology that maximizes water storage, in employing determinants for maximum Pondage that allow India to manipulate its calculations in this regard, and in linking, in any event, maximum Pondage to the load demand of each particular HEP and thus to India’s variable yet exponentially growing energy demand, it is difficult to see how the Majority’s approach addresses Pakistan’s vulnerability as the downstream riparian; limits India’s storage of water on the Western Rivers; fixes and delimits the rights and obligations of the Parties; or contributes to the effective settlement of disputes between them. Even with the obvious constraints relating to the calculation of stream flow clearly stipulated in Paragraph 2(i) and the release requirements expressly provided in Paragraph 15 of Annexure D (Award, para. 811(O)(2)(i) and (iii)), the Majority have endorsed an approach whereby Paragraph 8(c) of Annexure D allows for a calculation of Pondage based, above all, on the load demand of a particular existing or future HEP.

18. It is difficult to consider that the downstream riparian, as one particularly concerned about the upstream riparian's use of this critical resource, would have accepted the Majority's open-ended approach to determining maximum Pondage insofar as it is based on an understanding of what is "required for Firm Power" as oriented to the power demand of a particular HEP, even if restricted by the inescapable limitations concerning the calculation of stream flow in Paragraph 2(i) and the release requirements in Paragraph 15 of Annexure D (see Award, para. 811(O)(2)(i) and (iii)). Indeed, a common-sense interpretation of the Treaty cannot support a supposition that, at the time of the negotiation and conclusion of the Treaty, Pakistani negotiators—when we try to ascertain their intentions as drafters—could possibly have accepted a formula that poses a considerable, perhaps existential, threat to itself (recall para. 4 above). The Majority's approach to maximum Pondage, however, seems to accept just that. In some respects, it does so expressly, in acknowledging that its approach "does introduce greater discretion" and "results in some greater uncertainty", and impliedly, in being able to indicate, beyond the calculation of stream flow and the operational Paragraph 15 requirements, no more than the lamentably low threshold of protection that maximum Pondage "shall be calculated based on a realistic, well-founded, and defensible projection of the proposed Annexure D, Part 3 HEP's installed capacity and anticipated load" (Award, para. 747(b))—words that flow too easily from the mouth but are in reality no more than platitudes.

Pondage as part of an exception

19. Beyond the object and purpose of the Treaty, one other matter to which the Majority give inadequate weight is the operation of Annexure D as an express exception to India's "let flow" obligation under Article III(2) of the Treaty. As the Award itself acknowledges, "[i]n case of doubt as to the scope of [an] exception, its terms must ... be strictly construed" (Award, para. 451, referring to *Certain German Interests in Polish Upper Silesia*, Merits [1926] PCIJ Series A, No. 7, p. 48). So, even if the wording of Paragraph 8(c) of Annexure D were equally open to the two interpretations in question, *quod non*, the operation of that provision as part of an exception to the general "let flow" obligation would call for the narrower reading of Paragraph 8(c), where the HEP's anticipated load is not a determinant of maximum Pondage.
20. The Majority instead consider that they need not identify "a methodology of some kind that leads to the smallest Pondage possible" (Award, para. 704). Apparently, they consider this to be so even if that methodology reflects the ordinary meaning of the relevant terms and best accords with the object and purpose of the Treaty, particularly as regards Pakistan's vulnerability and the objective of limiting India's storage of water on the Western Rivers. For the Majority, it is sufficient, without explaining why, that the Annexure D exception concerning India's generation of hydro-

electric power is “strictly construed, in the sense that it does not permit India to generate hydro-electric power on the Western Rivers based on what might be the ideal or best practices approach for engineering a run-of-river HEP” (Award, para. 650), although this is not relevant to either of the two interpretations of Paragraph 8(c) that the Court considered.

21. Here, the Majority might have benefited from the finding of the *Kishenganga* Court that

“Annexure D ... restricts the permissible volume of pondage, and pegs this limit to power generation at the minimum mean discharge calculated at the site. These are not generous limits—the volume of storage permitted to India on the Jhelum Main, for instance, is zero—and even the limited available record of the Treaty’s negotiating history suggests that these amounts of storage were a key point of contention between the Parties. The outcome was significant in that it achieved a careful balance between the Parties’ respective negotiating positions, allowing India hydro-electric use of the waters of the Western Rivers while protecting Pakistan against the possibility of water storage on the upstream reaches of those Rivers having an unduly disruptive effect on the flow of water to Pakistan.”¹⁵

The relevance of engineering treatises

22. Having abandoned the clear and obvious interpretation of the relevant provisions of the Treaty, the Majority also sought support and confirmation for their approach in placing considerable reliance on the understanding of pondage in certain treatises concerning dam engineering practices (Award, paras. 663–666¹⁶). The understanding in these works as to the purpose of Pondage accords with that provided in Paragraph 2(c) of Annexure D. This does not necessarily mean, however, that the approach taken in these works to calculating pondage reflects the approach prescribed by the Treaty as to maximum Pondage.
23. Indeed, the treatises on which the Majority rely cannot be expected, and have not been suggested to, concern themselves with HEPs beyond typical intra-state projects that are entirely divorced from considerations that may be relevant in cross-border river systems. This includes those elements that are relevant under the Treaty in light of the “let flow” and “no storage” obligations in Article III(2) and (4) respectively, as well as the specific regulation of maximum Pondage under Paragraph 8(c). As Professor Minear emphasizes, engineering treatises have no regard to national boundaries (Concurring Opinion, para. 26). So, too, are all the legal considerations that arise when international boundaries and the use of the same waters by different sovereign entities are in question. Indeed, these treatises concern themselves with maximizing the efficiency of the

¹⁵ *Indus Waters Kishenganga Arbitration (Pakistan v India)*, PCA Case No. 2011-01, Partial Award, 18 February 2013, para. 504.

¹⁶ See, notably, “such treatises provide considerable information about how to calculate pondage, including through equations and tables, and in doing so stress that the calculation of pondage requires identification of what is necessary to meet the peak load of the plant”, at para. 666.

use of the waters in the abstract,¹⁷ not with “the most complete and satisfactory utilization of the waters”, a distinct standard set by the Treaty and strictly regulated by specific obligations concerning the Eastern Rivers and Western Rivers so as to meet demands by both Parties.

24. Tellingly, the Majority have not been able to cite a single other case where installed capacity and anticipated load have been determinants of maximum Pondage in cross-boundary situations. The skewed focus of these treatises on power generation and their limited usefulness in contexts like the present one is reflected also in the characterization of pondage that fails to fully satisfy a plant’s installed capacity and load demand as “deficient”. This is so even where a run-of-river plant is operating in a particular context, for example in maintaining a particular water level, as for navigation.¹⁸ This separate context of the engineering treatises ought to have been considered, but seems to have been missed, by the Majority.

The relevance of Paragraph 15 and Appendix II of Annexure D

25. The Majority consider that their approach is supported also by certain other aspects of the Treaty. For example, they refer to Paragraph 15 of Annexure D as context for Paragraph 8(c) of Annexure D (Award, para. 678¹⁹). In particular, in what must be a prime case of concave logic, they consider Paragraph 15 to weigh against the interpretation of Paragraph 8(c) that is not based on the anticipated load of the HEP effectively because India would then be unable in certain contexts, by virtue of the relatively limited Pondage, to violate the obligation imposed by Paragraph 15. The impossibility of India in certain contexts breaching Paragraph 15, however, does not deprive Paragraph 15 of its usefulness, despite what the Majority suggest (Award, paras. 682–683²⁰). The principle of *effet utile* dictates against an interpretation that renders futile or irrelevant certain terms or provisions (see, for example, *Alleged Violations of Sovereign Rights and Maritime Spaces in the Caribbean Sea (Nicaragua v. Colombia)*, *Preliminary Objections, Judgment, I.C.J. Reports 2016*, p. 23, para. 43). It does not dictate against the interpretation of a treaty provision

¹⁷ See, for example, **P-0309**, W. P. Creager and J. D. Justin (eds.), *Hydro-Electric Handbook* (John Wiley & Sons, 2nd ed., 1950), pp. 160, 162.

¹⁸ See, for example, *ibid.*, pp. 162, 191.

¹⁹ “[T]he ordinary meaning of Paragraph 8(c) must be interpreted in its context, to include other relevant provisions of Annexure D and of the Treaty as a whole. One important element of context is Paragraph 15 of Annexure D”.

²⁰ See, in particular, para. 683: “under Pakistan’s methodology for calculating ‘maximum Pondage’, the resulting available storage might render the flow requirement of Paragraph 15—a seemingly key element in protecting Pakistan’s ‘let flow’ rights—largely irrelevant. That consequence supports an inference that the Treaty drafters did not envisage a methodology for calculating ‘maximum Pondage’ that renders downstream release restrictions of no or little import. The principle of *effet utile* in the interpretation of treaties favors reading Paragraph 8(c) in a way that gives practical meaning to Paragraph 15 and avoids rendering it redundant or ineffective”.

in a way that limits its applicability to certain factual circumstances. Taken to its extreme, such a position could have absurd results. Indeed, in accepting that Paragraph 15 sets out an operational, not a design restriction (Award, para. 680²¹), it is clear that the Parties intended to retain Paragraph 15 as an *additional constraint* on the operation of Annexure D, Part 3, HEPs, in whatever circumstances the potential for its breach might come into play.

***Effet utile* in respect of Paragraph 8(c)**

26. As regards the question of *effet utile*, one may wonder what effectiveness Paragraph 8(c)—the principal provision concerning maximum Pondage—retains under the Majority’s interpretative approach. According to the Majority, Paragraph 8(c) (not the entirety of the Majority’s approach, as Professor Minear mistakenly considers me to suggest²²) effectively does little more than doubling the Pondage needed to meet fluctuations in the discharge of the turbines arising from variations in the daily and the weekly loads of the HEP in question. If that was its intended purpose, one may wonder why Paragraph 8(c) does not refer simply to twice the amount of Live Storage needed for the purpose described in Paragraph 2(c). In referring instead to the Live Storage required for Firm Power—which is expressly defined as the hydro-electric power that corresponds to the minimum mean discharge at the site of a HEP—the Treaty’s terms serve the clear function of tying maximum Pondage to the rate of power that can be produced at the minimum mean discharge flow rate at the site of the HEP.

Paragraph 9 and Appendix II of Annexure D

27. Neither Paragraph 9 nor Appendix 11 of Annexure D contains any express reference to installed capacity or anticipated load; the Majority nevertheless consider their approach to be consistent with Paragraph 9 and Appendix II of Annexure D. Even if *arguendo* these aspects of the Treaty are capable of being read as obliging India to notify Pakistan of a HEP’s installed capacity and anticipated load and thus as compatible with the Majority’s interpretation of Paragraph 8(c) of Annexure D (Award, para. 689²³) *quod non*, this does not necessarily support the Majority’s

²¹ “The Court agrees that Paragraph 8(c) identifies a design criterion, while Paragraph 15 sets out an operational criterion.”

²² Concurring Opinion, para. 29.

²³ “Appendix II can be read as requiring the provision of information as necessary to understand the plant’s installed capacity and anticipated load. Paragraph 3(b) of Appendix II directs that India provide ‘calculations for the Operating Pool’, and Paragraph 4 of Appendix II directs that India provide the aggregate capacity of power units and expected variations in turbine discharge on the account of load fluctuations. Such provisions are consistent with an interpretation of the ordinary meaning of Paragraph 8(c) that calls for calculating maximum Pondage using, in part, the plant’s installed capacity and anticipated load”.

approach to maximum Pondage. To suggest otherwise is to put the cart before the horse, so to speak. It is, for example, in finding that a HEP's installed capacity and anticipated load are relevant to the size of the Operating Pool that the Majority then consider information on these matters to be provided as part of the "calculations for the Operating Pool". If the anticipated load—which is subject to manipulation—was so central to the question of maximum Pondage as the Majority's approach would have it, the Treaty may well be expected to make express reference to the anticipated load and the data on which such an assessment is based as part of the information that India is required to communicate to Pakistan under Appendix II. That such information is not unambiguously and expressly required by the Treaty is exactly why the Majority can say no more than that Appendix II "*can be read* as requiring the provision of information as necessary to understand the plant's installed capacity and anticipated load" (Award, para. 689 (emphasis added)) or, in the words of Professor Minear, that these provisions "*effectively* require India to inform Pakistan of the plant's installed capacity and anticipated load" (Concurring Opinion, para. 30 (emphasis added)).

Annexure E

28. Also, as context, the Majority have regard to Annexure E, Paragraph 21(a) of which provides for the determination of maximum Pondage in respect of a HEP that is incorporated in a Storage Work. According to this provision, "maximum Pondage ... shall not exceed the Pondage required for the firm power of the plant". In the view of the Majority, the fact that this determination of maximum Pondage is informed by the plant's installed capacity and anticipated load calls for the same interpretation in respect of Annexure D, Part 3, HEPs. In making this determination, however, the Majority appear not to give any consideration as to other possible reasons for differences among the determination of maximum Pondage under Annexure D and Annexure E, including as regards the ability of the drafters of the Treaty to pre-select the specific characteristics of any given reservoir in what concerns Annexure E (see para. 698²⁴). The Majority merely satisfy themselves as to what they considered to be the more "natural[] read[ing]" of Annexure E (Award, para. 699), despite all of the countervailing considerations considered in the present Opinion.

²⁴ See the reference to Pakistan's argument that "[t]he Treaty does not provide a specific computation method for the storage reservoir firm power because of the number of variables involved. The drafters of the Treaty would not have been able to pre-select the specific characteristics of any given reservoir, which affect the firm power and firm energy."

Subsequent practice

29. Further, the Majority seek to rely on the subsequent practice of the Parties in support of its interpretation of Paragraph 8(c). This reliance is misplaced. Unlike for the interpretation of Paragraph 8(a), 8(d), 8(e) and 8(f), where the Court focuses on whether the subsequent practice establishes the agreement of the Parties regarding its interpretation (see paras. 581, 592, 606, and 769), when it comes to maximum Pondage the Majority take a more expansive view as to the relevance of practice, including its “supplementary” character “to confirm” a particular meaning already arrived at (Award, para. 708). While this is not inherently problematic, it is telling that the Majority focus on the practice of Pakistan and only in a certain time-period. In so doing, moreover, they interpret Pakistan’s practice in a particular and not uncontested way and accord importance, for example, to what the Pakistan Commissioner for Indus Waters “likely would have known” on account of his involvement in the Treaty negotiations (Award, para. 719), as if Pakistan’s understanding of a treaty provision and the common intention of the Parties may be discerned on such a basis.
30. The Majority do not consider whether India has consistently communicated to Pakistan the anticipated load of its Annexure D, Part 3, HEPs to Pakistan, and what the absence of any such information might suggest as to the interpretation of the Treaty. Not a word is said about this in Professor Minear’s Concurring Opinion either, who chooses not to treat this point as my “primary” one in relation to subsequent practice (see Concurring Opinion, para. 33). Nor do the Majority consider, or explain why they disregard, Pakistan’s practice for what, at a minimum, is at least a roughly equivalent subsequent time-period during which Pakistan has clearly and persistently positioned itself against the position now adopted by the Majority.
31. Moreover, the Majority’s approach to subsequent practice in relation to maximum Pondage, as well as the range of practice that does exist, indicates the absence of agreement among the Parties that installed capacity and anticipated load are determinants of maximum Pondage for Annexure D, Part 3, HEPs. The threshold for evidencing any such agreement is high, and the Majority seemingly accept that there is no practice establishing the agreement of the Parties on this matter (e.g. Award, para. 727). As the ICJ has stated, “[e]vidence of a tacit legal agreement must be compelling”.²⁵ This is *a fortiori* so in relation to the permanent fixing and delimiting of rights concerning the use of the Indus Waters, comparable in many ways to “[t]he establishment of a permanent maritime boundary”. Like the former, the latter “is a matter of grave importance and

²⁵ *Territorial and Maritime Dispute between Nicaragua and Honduras in the Caribbean Sea (Nicaragua v. Honduras)*, Judgment, I.C.J. Reports 2007, para. 253. See also *Delimitation of the maritime boundary in the Bay of Bengal (Bangladesh/Myanmar)*, Judgment, ITLOS Reports 2012, para. 117.

[for which] agreement is not easily to be presumed”, as stated by both the ICJ and the International Tribunal for the Law of the Sea.²⁶

32. In light of the above, it is apparent that the weight of the practice of only one of the Parties (that that Party understands differently and also explains on other grounds²⁷) and for only a portion of the relevant time-period is, and must be, particularly limited in confirming any particular interpretative approach.

The regulation of Small Plants

33. The Majority give outsized importance also to other elements as support for their interpretation of Paragraph 8(c). This includes the regulation of Pondage for Small Plants. In particular, the Majority take the view that, because maximum Pondage for Small Plants is to be determined by reference to “the load-based concept of Pondage”, a similar approach must be adopted for Annexure D, Part 3, HEPs too (Award, para. 672²⁸). It is unclear, however, why the Majority consider the way in which the Treaty regulates Pondage for Small Plants to be relevant, not as context, but in ascertaining the ordinary meaning of the terms of Paragraph 8(c). Paragraph 8(c) does not concern itself with Small Plants.
34. Moreover, if the regulation of Small Plants were indeed relevant to the interpretation of Paragraph 8(c), regard might have to be had also to additional restrictions concerning the design of Small Plants found in Paragraph 18 of Annexure D, which the Majority do not consider, without explaining why, which only demonstrates that the analogy is false.
35. More fundamentally, if, as the Majority effectively suggest, Paragraph 2(c) is intended to operate as the basis for determining the maximum Pondage for all Annexure D, Part 3, HEPs, this begs the question, relating to the abovementioned point about the *effet utile* of Paragraph 8(c), as to why the Treaty contains the formulation found in Paragraph 8(c). It might have instead been sufficient to indicate that maximum Pondage is twice what is required for Pondage, as understood by Paragraph 2(c).

²⁶ *Territorial and Maritime Dispute between Nicaragua and Honduras in the Caribbean Sea (Nicaragua v. Honduras)*, Judgment, I.C.J. Reports 2007, para. 253; *Delimitation of the maritime boundary in the Bay of Bengal (Bangladesh/Myanmar)*, Judgment, ITLOS Reports 2012, para. 95.

²⁷ Final Comments of Pakistan on Particular Matters Addressed in Procedural Order No. 14, paras. 2.48 – 2.49; Pakistan’s Post-Hearing Submission, para. 2.13.

²⁸ “[T]here is no textual basis for concluding that Paragraph 2(c) establishes the method for calculating Pondage for some HEPs regulated by Annexure D, Part 3, but cannot and does not also serve as a basis for calculating Pondage for other HEPs regulated by Annexure D, Part 3.”

36. In light of all this, the Majority’s suggestion that “there is no textual basis for concluding that Paragraph 2(c) ... does not also serve as a basis for calculating Pondage for other HEPs regulated by Annexure D, Part 3” appears misguided (Award, para. 672). Size does matter.

The travaux préparatoires

37. Another aspect to which the Majority give undue (even if limited) weight is the *travaux préparatoires*, which, according to the Majority, confirms its interpretation of Paragraph 8(c) of Annexure D. In particular, they take the view that the calculation of Pondage in an earlier draft “by reference to ‘daily and weekly load fluctuations’” supports a similar approach under the eventual text of the Treaty. According to the Majority, an explanation or acknowledgement of a change in the approach taken between that earlier draft and the eventual text of the Treaty “might be expected”. Absent this, the Majority consider the *travaux préparatoires* to support their interpretation of Paragraph 8(c) (Award, paras. 734–736). But the Parties are, of course, under no general obligation to explain changes to their draft agreements, nor do they invariably or even habitually do so. There is little to suggest that the Parties here otherwise provided all relevant explanations for other changes, and that the question of maximum Pondage is an obvious outlier.

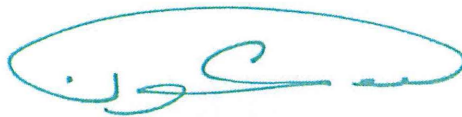
Conclusion

38. In sum, as a matter of international law, the reasons adopted by the Majority are evidently not solid bases for them to interpret Paragraph 8(c) in the way that they have. While considering various elements that may indeed inform the interpretation of a treaty provision, the Majority fail to adequately appreciate the ordinary understanding of the terms of Paragraph 8(c) of Annexure D. The ordinary and clear meaning of Paragraph 8(c) and Paragraph 2(i) provide sufficient and sufficiently clear guidance to determine maximum Pondage, with Paragraph 2(c) specifying the purpose of Pondage. Instead, the Majority unjustifiably introduce uncertainty that lacks textual basis and that is difficult to accord with the object and purpose of the Treaty. Moreover, they bestow outsized weight on certain considerations that are construed and considered in a particular, indeed unorthodox, and, occasionally, tendentious fashion, neglecting other factors that support a different—in my respectful opinion—correct and, in any event, more compelling construction of Paragraph 8(c) of Annexure D. It defies common sense to assume that at the time of negotiating the Treaty the crucial issue of calculating maximum Pondage was left open by the two Parties to two interpretations, one spelled out clearly and self-evidently, the other capable of being arrived at only by implication upon implication. It is equally impossible to assume that one Party, Pakistan, would have accepted a formula essentially dependent, above other considerations, on India’s ever-increasing energy demand.

39. The Majority's approach stands in stark contrast to the interpretation of Paragraph 8(c) that would determine maximum Pondage based only on the hydrological conditions at the site of the HEP in question, specifically in establishing a fixed, objectively verifiable volume of maximum Pondage for each HEP that relates to power production at the flow rate of minimum mean discharge at the site of that plant. This latter approach accords with the plain meaning of the texts while evidently satisfying the objectives of the Treaty in limiting India's storage of the waters of the Western Rivers and providing an objective and verifiable approach to the calculation of maximum Pondage that addresses Pakistan's vulnerability as the downstream riparian and ensures stability and finality in fixing and delimiting the rights and obligations of the Parties (see also para. 704 of the Award²⁹). In contrast to the Majority's approach, this interpretation would contribute also to the effective settlement of disputes between the Parties, while still being consistent with the context of Paragraph 8(c) and the *travaux préparatoires*, and allowing India to use the waters of the Western Rivers to generate hydro-electric power.

* * *

Date: 8 August 2025



Judge Awn Shawkat Al-Khasawneh

²⁹ The Majority accepts that this other interpretation “serves the object and purpose of the Treaty”.