

**Preliminary Comments of Pakistan on Particular Matters
addressed in Procedural Order No. 14
25 January 2025**

**PCA CASE NO. 2023-01
INDUS WATERS TREATY ARBITRATION (PAKISTAN V. INDIA)**

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Introduction

1. By Procedural Order No. 14 (Further Directions Regarding the Production of Papers and Other Evidence; Further Comments by the Parties on Particular Matters), dated 6 December 2024 (“**PO14**”), the Court of Arbitration invited the Parties to address certain matters, as follows:

- a. **Historic Practice with Respect to the Calculation of Maximum Pondage:** In paragraph 2.4 of PO14, the Court invited comments on the historic practice of the Parties with respect to the calculation of maximum Pondage pursuant to Annexure D, paragraph 8(c), in light of the views expressed by the Commissioners for Indus Waters in correspondence referenced by the Court. The Court further invited the Parties to elaborate on the extent to which their respective Commissioners for Indus Waters during these periods had previously been involved in the negotiation of the Treaty and the relevance, if any, of the involvement of such persons in the practice of the Parties in the implementation of the Treaty.
- b. **Near-term effects of Sediment Accumulation on Pondage:** In paragraph 2.7 of PO14, the Court invited comments on the near-term effects of sediment accumulation on Pondage for HEPs on the Western Rivers, and its relevance when interpreting the Treaty’s provisions on the calculation of Pondage.

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c. **Comments on available data on sediment accumulation:** In paragraph 2.9 of PO14, the Court invited comments on the available data (including in the public domain) on the actual or estimated sedimentation accumulation rates of reservoirs on the Western Rivers, including the Baglihar HEP.

2. By letter dated 19 December 2024, in response to an application by Pakistan concerning the deadline for the submission of comments, the Court provided that final comments on the matters raised in paragraphs 2.4, 2.7 and 2.9 of PO14 should be submitted by Friday, 21 February 2025 but noted that, in the event that either Party was in a position to submit preliminary comments on the matters addressed in paragraphs 2.1–2.4 and 2.5–2.7, the Court would be grateful to receive such comments by Saturday, 25 January 2025.

3. In response to the Court’s request, Pakistan herein submits **Preliminary Comments** on the matters raised by the Court. Pakistan will elaborate on these comments in its Final Comments to be submitted by Friday, 21 February 2025.

Historic Practice with Respect to the Calculation of Maximum Pondage (*Paragraph 2.4*)

4. In paragraph 2.3 of PO14, the Court noted certain historic correspondence between the Parties’ Indus Waters Commissioners with respect to the calculation of maximum Pondage concerning Indian HEPs on the Western Rivers prior to the declaration of the Baglihar HEP. In paragraph 2.4 of PO14, the Court invited comment on this correspondence and the relevance, if any, of the involvement of the Commissioners in the negotiation of the Treaty for the practice of the Parties in implementation of the Treaty.

5. Pakistan has carefully reviewed the correspondence referenced by the Court. It has also gone back to review both the *travaux préparatoires* of the Treaty and the Wheeler Archive. On the basis of this further review, Pakistan can find nothing in the preparatory materials that leads to the conclusion that those involved in the Treaty drafting process considered load to be the central criterion for the calculation of maximum Pondage under Paragraph 8(c) of Annexure D of the Treaty. This said, by way of preliminary comment,

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Pakistan offers the following observations and initial conclusions, which will be elaborated upon in Pakistan's Final Comments to be submitted on 21 February 2025.

6. The documents identified by the Court cover a period between 1968 and 1990. One of Pakistan's Commissioners from within that period, Khalil-ur-Rahman, served as part of the Pakistani delegation in the Treaty negotiations (named in the *travaux* as "Mr Khalil"), and appears at one point to have been its deputy head. As Pakistan's Commissioner, Mr Khalil served between 1964 and 1971. In that capacity, he was the recipient of the first two proposals from India for new HEPs under Paragraph 9 of Annexure D in 1968, namely, the Stakna and Sumbal HEPs.

7. As a member of Pakistan's delegation, Mr Khalil would have been aware of the drafting shift that occurred in what would become the Pondage provisions of Annexure D over the period August 1959 to April 1960. As Pakistan addressed in the course of the hearing on the First Phase on the Merits ("**the Hearing**"), the importance of HEP loading in the calculation of maximum Pondage diminished progressively with each negotiating draft, starting off as a criterion for the calculation of Pondage but later being moved to become part of the definition of Pondage, being replaced as the design criterion for the calculation of maximum Pondage in Paragraph 8(c) by the bespoke concept of Firm Power linked to the historical hydrology of the proposed HEP site, and thus being incapable of manipulation by either Party.¹ This shift away from "load" to "Firm Power" as the central Pondage design criterion is reflected in the arrangement and final formulations of Paragraphs 2(c), 2(i) and 8(c) of Annexure D.²

8. Mr Khalil's participation in the Treaty negotiations may have raised, in the mind of the Court, a question of why Mr Khalil failed to object when India proposed the Stakna and Sumbal HEPs in 1968 with Pondage pools calculated on the basis of the anticipated load on the Plants. The answer is provided when one examines the HEPs in question. These were tiny HEPs with Operating Pools of less than 1Mm³ that were calculated on the basis of daily and not weekly Pondage.

¹ Load remained a central design criterion for Small Plants: Treaty, **PLA-0001**, Annexure D, Para. 18(b).

² Transcript (Day 2), 9 July 2024, pp. 56:20–61:16.

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9. Although the absence of documentary evidence on the point and the passage of time leaves the matter speculative, Pakistan notes that, in the circumstances, it is unsurprising that Mr Khalil did not challenge India's approach in respect of these Plants. In the early days of the Treaty, in the face of the two proposed tiny Plants, with inconsequential Operating Pools, objecting to India's proposals would have led to a contestation between the parties at a sensitive point in its history, just as the Transition Period stipulated in Paragraph II(6) of the Treaty was coming to an end. Although, more than 55 years later, this is ultimately a matter of speculation, Pakistan suggests that Mr Khalil's silence in the face of India's proposals is both understandable and inconsequential as regards his, or Pakistan's, appreciation of the Treaty criteria for the calculation of maximum Pondage. Indeed, it is notable that on no occasion did Mr Khalil state that Pakistan agreed with or otherwise approved of India's approach to the calculation of Pondage.

10. So far as the rest of the HEPs identified by the Court in PO14 are concerned, the correspondence shows two features that warrant brief preliminary comment.

11. First, the correspondence shows that Pakistan first began to raise concerns with respect to India's approach in 1976, during the tenure of Mr Khalil's successor, Habib-ur-Rahman (no relation).³ The period in which Pakistan seemingly 'went along' with India's way of doing things was therefore a short 8-year span between 1968 and 1976, during which India proposed HEPs with a miniscule Live Storage.

12. Second, the correspondence also shows that Pakistan began to object to India's HEP Operating Pools as India's design logic changed. The critical point came with the Dul Hasti HEP. Unlike other HEPs that India had proposed in the period under review, Dul Hasti was proposed with a far larger installed capacity and its Pondage was calculated on a weekly, not daily basis. While Pakistan did not protest the Dul Hasti HEP immediately, possibly in the hope that it was a one-off, when the even larger Baglihar HEP was proposed in 1992, with the same design logic, Pakistan concluded that India's approach to HEP design had

³ See, notably, Mr Habib's correspondence concerning the Lower Jhelum HEP: Letter No WT(85)/(3487-A)/PCIW from PCIW to ICIW dated 21 January 1976, **Exhibit P-0649.0342**, pp. 4-5; Letter No WT(85)/(3567)/PCIW from PCIW to ICIW dated 26 July 1976, **Exhibit P-0649.0361**, p. 3.

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fundamentally changed. As is well known, Pakistan objected immediately to India's design criteria for the Baglihar HEP, including its approach to the calculation of maximum Pondage. Consistent with this, it registered a protest to the Dul Hasti HEP design on a similar basis within a matter of weeks.

13. Pakistan will address the Commissioners' engagement in this early period more fully in its Final Comments.

Near-term effects of Sediment Accumulation on Pondage *(Paragraph 2.7)*

14. Paragraph 2.5 of PO14 notes the Court's interest during the Hearing on the length of time it would take for sedimentation to reach the sill-level of the low-level outlet for reservoirs on the Western Rivers, such as Baglihar HEP.

15. An initial response to this question was provided during the Hearing by Dr Greg Morris.⁴ Dr Morris explained that long-term simulations on similar reservoirs show that because Himalayan sediments settle rapidly, which means the delta advances into the reservoir, the recommended sediment management approach was to move the delta profile towards the outlets gradually. Dr Morris subsequently elaborated, that the aim is to develop an equilibrium profile.⁵

16. As a preliminary comment to the Court's PO14 enquiry, Pakistan notes that the extent to which Pondage is subject to sediment accumulation depends on the way in which the reservoir is operated.

- a. Continuous high-level operation. If India was to hold the reservoir at the maximum level (Full Pondage Level) during months of high flow when sediments are delivered into the reservoir, this would place the entire capacity of the Operating Pool below the water surface, leading to significant sedimentation within the Operating Pool.

⁴ Transcript (Day 4), 11 July 2024, pp. 47:2–50:4.

⁵ Transcript (Day 4), 11 July 2024, pp. 56:8–58:4.

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b. Seasonal sluicing. On the other hand, if the reservoir was held at the Minimum Operating Level during the monsoon, the Operating Pool would be above the water surface when most sediment enters the reservoir, with the result that there would be very little opportunity for sediment to accumulate in the Operating Pool.

17. Paragraph 2.6 of PO14 notes that “Pakistan did not appear to contest such potential near-term effects of sediment accumulation on Pondage during the *Baglihar* Neutral Expert proceedings, nor did it address in this proceeding such effects for HEPs generally on the Western Rivers.”

18. Pakistan notes that the analysis advanced by both India and Pakistan during the *Baglihar* proceedings was based on the assumption of sediment sluicing, not the use of drawdown flushing.⁶ Notably, in the course of the Third *Baglihar* Meeting, India changed its position to indicate that it considered that the question of flushing did not arise in the case and that no further comment was required.⁷ Between the Third and Fourth Meetings, however, for reasons that are not evident from the record, it appears that the Neutral Expert reached a conclusion that, notwithstanding the Parties’ positions, drawdown flushing was permitted under the Treaty. This conclusion was presented by the Neutral Expert in the course of the Fourth Meeting, when he presented his draft final report, Neutral Expert announcing that in his view flushing was part of the “state-of-the-art” with respect to sediment management and that the Treaty permitted it.⁸ This position expressed by the Neutral Expert thereafter became the foundation of India’s position going forward and it proved impossible for Pakistan to reopen the issue for consideration by the Neutral Expert.

19. In its 21 February 2025 Final Comments, Pakistan will comment on the modelling used in the *Baglihar* proceedings. The short point at this stage is that both of the models used in those proceedings had severe limitations in that India did not provide data on the

⁶ *Baglihar Hydro-electric Plant (Pakistan v India)*, Neutral Expert Determination on the Baglihar Hydro-electric Plant dated 12 February 2007, **PLA-0002**, p. 56.

⁷ On the basis that the Baglihar HEP had been designed to work with sluicing as the principal form of sediment management: *Baglihar Hydro-electric Plant (Pakistan v India)*, Transcript of Third Meeting (Day 3), 28 May 2006, pp. 138:22–139:7. Pakistan’s position remained that the Treaty prohibits flushing: *id.*, p. 3:14–16.

⁸ *Baglihar Hydro-electric Plant (Pakistan v India)*, Transcript of Fourth Meeting (Day 1), 2 October 2006, pp. 51:8–82:7.

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particle size distribution of the suspended sediment, nor were the models calibrated against the sedimentation history in another then-existing reservoir on the Chenab, the Salal HEP. Pakistan will elaborate upon the experience at the Salal HEP in its 21 February 2025 Final Comments.

20. Based on the limited data that Pakistan has on the Baglihar HEP, Pakistan will address the issues further, in its Final Comments of 21 February 2025, by way of a model of sedimentation at that site.

21. Paragraph 2.7 of PO14 invites the Parties to provide comments on the near-term effects of sediment accumulation on Pondage for HEPs on the Western Rivers, and its relevance when interpreting the Treaty's provisions on the calculation of Pondage. As an initial response, Pakistan makes two preliminary comments.

22. First, Pondage cannot be preserved by simply making it larger, as even the excessively large pondage pools at Indian HEPs can be filled with sediment if India operates these facilities by sustaining a high pool level, an operational procedure which maximises sedimentation within the Operating Pool. The preservation of Pondage requires that the reservoir be operated in a manner which (a) complies with the limitations imposed by the Treaty, and (b) controls sediment accumulation in the Operating Pool. Both requirements may be achieved by seasonal sluicing, holding the reservoir at the minimum allowable level (i.e., Dead Storage Level) during the wet season to prevent sediment accumulation within the Operating Pool. Other Treaty-compliant options, such as dredging, could also be used.

23. Second, the utilisation of Pondage under the Treaty is tied to power production, not to sediment management – as is made clear in the Treaty itself and as explained by Pakistan at the Hearing by reference to the language of Paragraph 2(c) of Annexure D.⁹

⁹ Transcript (Day 7) 16 July 2024, 60:20–61:7.

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Comments on available data on sediment accumulation *(Paragraph 2.9)*

24. For completeness, Pakistan notes that paragraph 2.8 of PO14 references two articles in the public domain that address the actual or estimated sedimentation accumulation rates of reservoirs on the Western Rivers, including the Baglihar HEP, and the resulting loss in the volume of Pondage and controllable storage. In paragraph 2.9 of PO14, the Court invites comments on the available data (including in the public domain) addressing these matters.

25. Pakistan is in the process of undertaking a wider literature review. It will address this in its Final Comments on 21 February 2025.
