

Gate two query process

Strategic solution(s)	Severn Thames Transfer
Query number	STT006
Date sent to company	09/12/2022
Response due by	13/12/2022

Query

Thank you for providing a summary of utilisation over historic and stochastic time series information. With reference to Section 4.9, please detail the reasoning behind why the full STT scheme utilisation of individual sources and phasing has not been provided in the Gate 2 submission. Detailing why this will be delayed until Gate 3. Outlining any obstacles and barriers to providing this information at this stage.

Solution owner response

The information relating to the STT used in the Regional Plans was provided in early 2022. The Gate 2 process since then has developed the understanding and details of the STT. It is noted in the Gate 2 report that Regional modelling is ongoing and we are proposing to provide further information / update to the Regions in 2023. The updated model output may change the utilisation of the sources in the final regional plans. There are no obstacles or barriers to this information but we need to reflect that the process will evolve in 2023/gate 3. Section 4.9 is reflecting this position.

For example to illustrate the type of changes noted above, since the information provided in early 2022 there have been:

 a reduction in the direct release volume and increase in the Vyrnwy Bypass capacity,

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- the requirement of Shrewsbury and Mythe by WRW to resolve their deficit
- and adjustments to costs.

In addition looking forward we can see further changes emerging, such as the percentage of river losses in the system which may improve the overall available water volumes.

The more detailed breakdown of utilisation for the individual sources at the time of the Gate 2 submission is provided below and we note that source phasing is provided in Table 4.2 of the submission.

Source	Based on stochastically generated flow data (climate drivers from 1950 – 97)
Netheridge	6.20% with unsupported transfer and 22.30% with sweetening flow and options
Lake Vyrnwy	7.80%
Minworth (for larger support requests)	6.4%

- These results are based on DO modelling which maximised Thames usage for a particular scenario. Since then the need from WRSE has expanded to other companies and different updates to regional modelling have changed the context
- The utilisation of Vyrnwy increases to 15% when accounting for a trades to STW as part of addressing the WRW deficit

Date of response to RAPID	13/12/2022
Strategic solution contact / responsible person	askSTT@jacobs.com