

Inderscience Publishers: IJISE-100689 : Request to revise your article

Inderscience Submissions <no-reply@indersciencesubmissions.com>

Dom, 29/05/2022 19:16

Para: tatianabf_8@hotmail.com <tatianabf_8@hotmail.com>



Dear Prof. Dr. Tatiana Balbi Fraga,

We have now completed the reviewing process of your article IJISE-100689 entitled "Elaboration of Water Distribution Schedules in Periods of Scarcity", which you submitted to the Int. J. of Industrial and Systems Engineering, and we are pleased to say that we consider it a good candidate for publication, once a number of revisions are made.

Please read the reviewers' recommendations listed below and revise your article in light of their comments.

To help the reviewers check that you have made the required corrections, please insert at the beginning of your revised article a detailed response to the reviewers' recommendations. Make sure you address each recommendation thoroughly and methodically. You should also show where the reviewers can find your change in the revised article by referring to the page number and preferably highlighting the updated text.

When revising your article please ensure that your reference list is up to date and that any recent articles, including those from IJISE, which are of relevance to your article are included. Having a broad and up to date reference list is vital to the quality of an article, and very useful to the readership.

You will need to upload your revised article to our submissions system. The reviewers will then re-review your article. If they accept your revised version without any additional changes, it will move onto the next step in the publication process.

Please be reassured that only very few submissions are accepted without requiring some revision.

We look forward to receiving your resubmission within the next 30 days.

Please do not use the 'Reply' function with this email - we will not receive your message.

Kind regards,
Prof. Angappa Gunasekaran
Int. J. of Industrial and Systems Engineering

Reviewers' Comments to Author

REVIEWER 1 (Offline Reviewer)

Review date: 29 May 2022

MANUSCRIPT FEATURES

Originality of the work: Marginal

Subject relevance: Marginal

Professional/industrial relevance: Marginal

Completeness of the work: Poor

Acknowledgement of the work of others by references: Poor

Organisation of the manuscript: Poor

Clarity in writing tables graphs and illustrations: Marginal

Likelihood of passing the test of time: Marginal

QUALITY AND RIGOUR

Have you checked the equations and/or statistics? (if applicable): yes

Are you aware of prior publication or presentation of this work?: yes

Is the manuscript free of commercialism?: yes

Is the article too long?: no

RECOMMENDATION: Acceptable with major revisions

REVIEW COMMENTS:

Changes which must be made before publication:

The subject of the paper looks interesting and suitable for IJISE. However, the paper requires a revision before it can be accepted for publication:

1. Number the main and sub.sections correctly to avoid any confusion.
2. The introduction section should include 3 to 5 latest references (2018 to 2022) from well known industrial & systems engineering journals and appropriate extracts from them in order to motivate the researchers in the subject.
3. Develop the literature review part of the paper to include 6 to 8 latest references (2018 to 2022) from well known industrial & systems engineering journals and relevant extracts from them. Please try to include 4 to 6 references from IJISE.
4. The research objectives and methodology should be better explained and motivated.
5. The mathematical model or theoretical framework should be described and motivated further.
6. The results and analysis section should be better analyzed and developed further.
7. Develop the conclusions section to include the unique contributions of the paper, theoretical and managerial implications, limitations of the research and future research directions.
8. The language of the paper needs a careful proof.editing. Otherwise, the paper will be rejected by the publisher.
9. References must follow the style of IJISE.

Suggestions which would improve the quality of the article but are not essential for publication:

NA

REVIEWER 2

Review date: 15 Apr 2022

MANUSCRIPT FEATURES

Originality of the work: Honours

Subject relevance: Honours

Professional/industrial relevance: Honours

Completeness of the work: Good

Acknowledgement of the work of others by references: Good

Organisation of the manuscript: Marginal

Clarity in writing tables graphs and illustrations: Marginal

Likelihood of passing the test of time: Good

QUALITY AND RIGOUR

Have you checked the equations and/or statistics? (if applicable): no

Are you aware of prior publication or presentation of this work?: no

Is the manuscript free of commercialism?: yes

Is the article too long?: no

RECOMMENDATION: Acceptable with minor revisions

REVIEW COMMENTS:

Changes which must be made before publication:

none

Suggestions which would improve the quality of the article but are not essential for publication:

This is a commendable paper, worth publishing if presented in clear fashion. It describes an actual situation and presents a detailed analysis.

The main criticism is that the presentation of the model is not as systematic as it could be. For example, the symbol $Pdistdsz$ is first used on page 8, but it is not defined until the bottom of page 10.

On page 7, there is a section heading "Decision variables," where the only set of variables defined is $Xdsl$. Nevertheless, on page 9, reference is made to "the binary variable Yrl ." If it is in fact a decision variable, it should have been defined on page 7. Also on page 9, it seems clear that $Vremdsl$ is a decision variable. On page 13, it appears that Yrl might be a known constant.

It would help the reader if it was made clear which symbols represent known constants and which are variables to be determined.

In summary, on page 7 there should be sections defining:

- 1) All known constants used in the model,
- 2) All variables, whose values are to be determined by the solver.

One can then present the constraints.

It might help the reader if subscripts were used only to indicate indices. Thus, instead of writing $Vremdsl$, where $remdsl$ are all subscripts, it might help to write it as $VREMdsl$, where only dsl are subscripts, and they correspond to indices over days, shifts, and locations. Currently, a mixed style is used. For example, the symbol $IrFidleness$ is used, where $idleness$ is a subscript, but IrF is not in subscript size.

On page 10, the authors discuss some of the computational challenges in solving this model. Two things that cause computational challenges are a) nonlinearities, and b) numerical scaling. It would be helpful if the authors pointed out which expressions are nonlinear, typically involving the product of two variables. Numerical scaling challenges arise for example with the objective function. On page 8 there is the statement: "we adopt $IrFidleness = 0.000005$ " for a weighting factor of one of the terms in the objective. Current computers generally can store numbers with up to 14 decimal digits, and can compute accurately to perhaps as low as only 7 decimal digits. If the objective function contains other terms that might be larger than 10^8 , then the 0.000005 terms will get lost in the round off error.

Here are some more detailed comments.

Page 2, bottom, change:

remove impurities even existing in the water.

to

remove impurities still in the water.

Page 5, top.

Figure 4 should be higher quality/resolution.

Page 6, bottom, change:

capacity of treated water, when the abstraction in water sources is at its maximum limit, is
288,000

to

capacity of treated water is 288,000

*** End of reviewer comments ***

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2) To upload your revised version, please:

Log in at <https://indersciencesubmissions.com/>

(you can get username and password reminders there)

Go to the 'Track progress of your article and submit revisions' section.

Locate your article and download the original submission file.

Make your changes as required and then click on 'Choose file' to select your revised document and then click 'Upload'.

3) By clicking on "Author/Editor Communication" you can read the reviewers' comments and any annotated files.
