

## DIII-D Record of Discussion

### Purpose

The [DIII-D National Fusion Facility](#) is a user facility of the [U.S. Department of Energy, Office of Science](#), under the [Fusion Energy Sciences \(FES\) program](#). Applicants submitting proposals that involve research activities at DIII-D need to complete this Record of Discussion (ROD). The purpose of the ROD is to help applicants prepare a proposal that is consistent with the capabilities and plans of the DIII-D program and to provide advance notice to FES concerning the potential resources required to support this proposed research. ***The ROD is not a merit review.***

### Instructions to Applicants

#### *Understanding the DIII-D Facility*

As you prepare your proposal, ensure that you are familiar with the DIII-D facility. The [DIII-D User Guide](#) is the reference for identifying information about DIII-D. The [Program Documents](#) page provides access to various policies that are relevant in the creation of your proposal. It is especially important to review the Guidance Documents known as “D3DG.06: Program Resources Provided to Users” and “D3DG.08: Data Management Plan” as they provide information directly relevant to the formulation of proposed research activities.

#### *Understanding the Research Program at DIII-D*

The research program at DIII-D is independent of the facility. The FES Tokamak Research (TR) program coordinates research at DIII-D, including the assessment of individual experiment proposals and the assignment of run hours. Details on research at DIII-D are available here, <https://d3dfusion.org/research/>

#### *Initiating a Record of Discussion*

Use the Contact Form at <https://d3dfusion.org/contact-us/> to request support for a ROD. In this request, please indicate any preferences for the TR Contact. The TR Contact is assigned by the DIII-D administrator and, in general, the role can be performed by anyone who is an active member of the TR program and is not affiliated with the lead institution on the proposal. It is acceptable for the TR Contact to be a paid participant on the proposal.

The ROD will be processed through the DocuSign service. Do not sign the document directly. Email correspondence from DocuSign through DIII-D typically uses the following address, [dse\\_na3@docusign.net](mailto:dse_na3@docusign.net).

After submitting the support request, and before receiving a reply, complete Section 1 of the ROD to the best of your knowledge. The response to your support request will provide you with an administrator who will provide detailed instructions and support you through the process. The administrator will collect your ROD with Section 1 completed and then perform the evaluation of Section 2. If the full ROD is required, then a TR Contact will be provided and you will also receive instructions on how to deliver a copy of your pre-proposal and other technical documents as necessary.

#### *Completing the Record of Discussion*

After receiving confirmations from the assigned administrator, interact with your TR Contact so that they can complete Section 3. Once Sections 1 through 3 are complete, then your part of the process is complete. The detailed instructions provided by the administrator will describe delivery of the completed ROD. A confirmation letter indicating that the ROD is being prepared in support of your proposal will be provided. For most solicitations, only this confirmation is submitted with the proposal (the detailed ROD form is generally not completed in time for submission within the proposal). All RODs are automatically provided to the FES Program Manager for DIII-D.

#### *Upon Award of the Proposal*

If your proposal is awarded, then please provide confirmation to the administrator as soon as possible. A post-award update to the ROD is required. That process occurs after the scope allowed by the award is finalized.



## Record of Discussion (ROD) for Funding Proposals Involving DIII-D Activities

| <b>Section 1: Proposal Information Provided by the Proposal Team</b><br><b>(please provide all information under the assumption that the proposal is awarded)</b>                      |                                                              |                                                              |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------|
| <b>1a) Basic Information</b>                                                                                                                                                           |                                                              |                                                              |       |
| <i>Principal Investigators (PIs): full names and affiliations, list up to three.</i><br><i>The first PI listed will be designated as the point of contact for completing this ROD.</i> |                                                              |                                                              |       |
| <b>PI #1 (ROD Point of Contact)</b><br>Full Name:<br><br>Affiliation:<br><br>Email:                                                                                                    | <b>PI #2</b><br>Full Name:<br><br>Affiliation:<br><br>Email: | <b>PI #3</b><br>Full Name:<br><br>Affiliation:<br><br>Email: |       |
| Proposal Title:                                                                                                                                                                        |                                                              |                                                              |       |
| Funding Source for Solicitation (e.g., US Department of Energy):                                                                                                                       |                                                              |                                                              |       |
| Solicitation Title:                                                                                                                                                                    |                                                              |                                                              |       |
| Numerical Identifier of Solicitation:                                                                                                                                                  |                                                              |                                                              |       |
| How is the proposed research scope related to fusion energy development as currently supported by the resources and capabilities of the DIII-D facility?                               |                                                              |                                                              |       |
|                                                                                                                                                                                        |                                                              |                                                              |       |
| What is the period of performance for this proposal?                                                                                                                                   |                                                              |                                                              |       |
| How many proposal team members will require office space at DIII-D, i.e., a dedicated office space for a period of time longer than one month?                                         |                                                              |                                                              |       |
| How many new users will this research bring to DIII-D?<br>A new user is someone who has never previously been a DIII-D user.                                                           |                                                              |                                                              |       |
| Which of the following supporting materials are you providing to DIII-D management to aid in this assessment?<br><i>Select all that apply.</i>                                         |                                                              |                                                              |       |
| Pre-application                                                                                                                                                                        | Draft Proposal                                               | Full Proposal                                                | Other |

|                                                                          |
|--------------------------------------------------------------------------|
| <b>1b) Research Goals of the Proposal</b>                                |
| Overall Goals of the Proposal                                            |
| Specific Goals Related to Activities Performed within the DIII-D Program |
| <b>1c) DIII-D Activities Performed by the Proposing Team</b>             |
| List of DIII-D Tasks to be Performed by the Proposal Team                |

**1d) Proposing Team Estimates of DIII-D Support Resource Needs and Facility Impacts  
(outside of contributions from proposal team listed above)**

*A DIII-D team member is anyone who participates in the program, regardless of affiliation or funding source.*

List of Research Support Tasks Provided by DIII-D Team (includes analysis, experiment design/execution, etc.)

List of Engineering Support Tasks Provided by the DIII-D Team (includes engineering design, integration of hardware into the facility, etc.)

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|--------------------------------------------------------------------------------------------------------------|
| <b>1d) Proposing Team Estimates of DIII-D Support Resource Needs and Facility Impacts (<i>Continued</i>)</b> |
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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| List of Computing Support Tasks Provided by the DIII-D Team (includes Plasma Control System modification/integration, hardware intended to connect to the DIII-D network and its purpose, data analysis setup including workflows, connections to high performance computing, etc.) |
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| List Hardware Expected to be Provided by DIII-D (proposing team must ensure compatibility between this request and the support policies of GD 06: Resources Provided to Users) |
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|-----------------------------------|
| Summary of Estimated Support Time |
|-----------------------------------|

|                                                                                |
|--------------------------------------------------------------------------------|
| Estimated Effort for Research Support from DIII-D Team Members (person-hours): |
|--------------------------------------------------------------------------------|

|                                                                                  |
|----------------------------------------------------------------------------------|
| Estimated Effort for Engineering Support from DIII-D Team Members(person-hours): |
|----------------------------------------------------------------------------------|

|                                          |
|------------------------------------------|
| DIII-D Computing Support (person-hours): |
|------------------------------------------|



|                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Section 3: Assessment of TR Contact</b>                                                                                                                                                         |
| <b>3a) Relationship to FES Tokamak Research Program Goals</b>                                                                                                                                      |
| Describe the TR program research goals that are advanced by the proposed activities, and how conducting these activities at DIII-D makes good use of unique capabilities provided by the facility. |
| What is the likelihood that the proposal will achieve its stated goals in relation to DIII-D activities?                                                                                           |
| Describe possible pitfalls or challenges that may limit the success of this research proposal (only pertaining to the DIII-D activities).                                                          |

### 3b) Response to Proposing Team's Plans and Resource Estimates

How many runs days of dedicated run time are required to meet the stated proposal goals? One run day is equivalent to eight run hours.

*In the three sections below, describe any suggested adjustments to the proposed research plan that would improve the likelihood of success as measured against the proposal's stated goals. These suggestions might include interactions between the proposing team and the DIII-D team following confirmation of award, e.g., analysis planning, assignment of specific responsibilities, etc.*

Suggestions related to research activities:

Suggestions related to engineering activities (any omissions in diagnostic and/or hardware needs should be included here):

Suggestions related to computing and/or PCS activities:

### 3c) TR Contact Confirmation and Signature

I confirm that I have discussed this proposal with the Proposal ROD Point of Contact to inform the assessments provided above.

Name:

Signed:

Date:

### Section 4: DIII-D Resource Assessments

*DIII-D resource assessments are provided to identify areas that may require attention prior to the proposed activities commencing at the facility. These assessments take the form of comments based on the information provided in this Record of Discussion (above sections) and through any supporting materials provided by the proposing team to DIII-D management.*

#### 4a) Engineering Assessment by Chief Engineer or Designate

Engineering Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The engineering assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

**4b) Diagnostics Assessment by DIII-D Diagnostics Director or Designate**

Diagnostics Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The diagnostics assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

**4c) Plasma Control System (PCS) Assessment by PCS Lead or Designate**

Plasma Control System Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The Plasma Control System assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

#### 4d) Computing Systems Assessment by Computing Systems Lead or Designate

Computing Systems Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The computing systems assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

#### Section 5: DIII-D Program Management Assessments

*DIII-D program management assessments provide high-level notes related to the proposed research's impacts on other current or potential future facility activities. These notes are vital for communicating to the Department of Energy DIII-D Program Manager any issues that may warrant attention if the subject proposal is awarded.*

#### 5a) Research Program Assessment by Research Director or Designate

Research Program Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The research program assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

**5b) Operations Division Assessment by Operations Director or Designate**

Operations Division Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The operations division assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date:

**5c) DIII-D Director Assessment**

DIII-D Director Assessment

I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The DIII-D director assessment above may need to be adjusted following award of this proposal and the determination of final scope.

Name:

Signed:

Date: