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| 1. **Employee Information** | | | | |
| **Employee’s Name:** | Justin Bracci | | **Employee ID #:** | 23706 |
| **Review Period:** | FY 2024 | | **Organization #:** | 5400 |
| 1. **Annual Evaluation Results:** Document performance including both results and behaviors. | | | | |
| *Current fiscal year major objectives agreed upon with line manager* | | *Current fiscal year accomplishments* | | |
| * Finalize SERA2.0 updates and refine inputs to be comfortable with how model is performing before upcoming hydrogen hub projects kick off in FY24. Also, develop detailed documentation on how to use each of the new features of the SERA model. Should be completed by end of Q2 in FY24 | | * Some updates to SERA inputs have been completed with future input updates needed with more funding * Detailed documentation on running the SERA model has been created and made available to those with an active SERA license | | |
| * Provide insightful SERA case results for several hydrogen hub projects and continue to improve both knowledge and confidence in presentation skills. Complete this by the end of FY24 | | * Hub projects delayed until FY25 * Presented at several meetings and webinars highlighting SERA’s capabilities (CESC webinar, EPA meetings)   + Have had companies/universities reach out expressing interest in using the SERA model * Also attended the HFTO AMR and presented a poster related to the electrolyzer supply chain analysis performed for MESC. | | |
| * Work with other NREL researchers (Masha Koleva and others) to develop a fully functioning optimization model for placing heavy-duty FCEV truck refueling stations through time in the United States. Complete this by end of Q2 of FY24.   + Learn from NREL researchers how to develop network optimization problems in python | | * Project went in a different direction. We ended up publishing an NREL technical report detailing the levelized cost of dispensed hydrogen for heavy-duty vehicles using the HDSAM model from ANL meetings)   + Report referenced by EPA, HFTO, and others * Still hope to work with other NREL researchers to develop station placement model (potential funding through OCED or EPA) | | |
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| *Other major accomplishments:*   * Expanded my research area to include clean energy technology supply chain analysis   + Completed initial phase of hydrogen electrolyzer supply chain analysis for MESC to guide their investment in manufacturing facilities in the US   + Leading or helping with other supply chain assessments for 1.) silicon (semiconductors/PV) 2.) energy storage, 3.) hydrogen fuel cells * Completed hydrogen TEA and emission analysis for FAA project detailing the cost and emissions associated with hydrogen infrastructure operations to support hydrogen-powered aviation at airports. Wrapping up the final report by the end of calendar year 2024. * Developed preliminary simple TEA model to estimate the cost of hydrogen production from ammonia autothermal reforming as part of an LDRD project. Further development in progress and continuing in FY25. | | | | |
| 1. **Line Manager’s Feedback** | | | | |
| * Justin has been a key member of the team contributing across many areas including supply chain, infrastructure optimization, and ammonia. * He brings an excellent attitude towards work and is always willing to take on new challenges and learn new things. He communicates technical work clearly, succinctly, and directly which makes collaboration with him easy. * I would like to see Justin continue to develop his presentation skills and take on more speaking opportunities. He does great work and people should hear about it first hand from him. * I also would like to see Justin become more comfortable with the scoping process and developing new research ideas. This isn’t an immediate goal, but something to start slowly developing to grow his career over the next 2-5 years. * I will work to ensure we can manage your time better so you’re only juggling 4-5 projects and spending 20-30% on each of them.   **Some comments from your peer review, including any areas for improvement if any mentioned:**   1. “Considering we worked together virtually only and compared to other collaborations, Justin’s willingness, clarity, and responsiveness in discussing analysis approaches and sharing finding were extraordinarily helpful.” 2. “He communicates well with the PI to execute tasks and provide expected time to complete tasks. Also, he’s a critical thinker and propose additional, useful tasks to make the project more impactful.” | | | | |
| 1. **Major Performance Objectives for Next Fiscal Year:** State major objectives for next year. | | | | |
| * Refine SERA2.0 inputs for OCED and H2 hub projects using latest information from tools/datasets such as H2A-lite, HDSAM, EIA AEO, etc. This should be completed within a month or two of the OCED project kickoff. | | | | |
| * Provide insightful SERA case results for several hydrogen hub projects and OCED. Continue to improve both knowledge and confidence in presentation skills. Complete this by the end of FY25 or by project deadline if later. | | | | |
| * Become more familiar with the RING supply chain model and Stella software so that I can update the model with new clean energy technology modules. Complete by the end of FY25. | | | | |
| * Become more familiar with the material and subcomponent supply chains for all major hydrogen infrastructure technologies (production, distribution, storage, end-use) so that I can hold the role of the hydrogen infrastructure supply chain expert in the MIIA group. Complete by the end of FY25. | | | | |
| 1. **Areas for Growth, Development and Challenge:** List skills, knowledge, or attributes that need to be developed or strengthened. | | | | |
| * Continue to develop my data analysis and optimization skills using python (numpy, pandas, plotting, etc.) and data visualization skills using tableau * Continue to pursue opportunities to present work and further refine public speaking skills whether that be during webinars, conferences, workshops, etc. * Challenge myself to help more with project scoping and developing research proposals | | | | |
| 1. **Overall Performance Rating:** | | | | |
| |  |  | | --- | --- | | |  | | --- | | **Exceptional** |   **Enter the overall performance rating:** |  |  |  | | --- | --- | |  | Type “Yes” in the box to the left if a corrective action plan is required. | | | | | |
| **Performance Rating Definitions:** | | | | |
| **Needs improvement** – Employee does not meet the performance and/or behavior expectations, and/or demonstrates only a minimum level of proficiency in the competencies required in their job on a consistent basis. This rating also applied to an employee who may exhibit workplace behaviors which negatively impact the ability to be effective in their role, although goals may be achieved. Additional skill development, commitment, and/or change in behaviors are necessary. This rating describes the employee who may meet only the very minimum position requirements and/or behaviors and change is necessary. The evaluation should detail the changes necessary for improvement to ensure clear expectations are defined.  **Successfully meets or exceeds expectations** – Employee is currently successful in their role and consistently meets and may frequently exceed the high NREL performance expectations commensurate with their position within the laboratory. The expected behaviors include proficiency regarding judgment, interpersonal and communication skills, and other competencies required in their job. This rating describes the employee whose overall performance is successful and above. Any minor areas where performance gaps exist were counterbalanced by overall successful performance and behavior that consistently met or exceeded expectations. The rating can also apply to employees new in their jobs who may be learning or lack experience but, overall, are successful in their role with no significant gaps in performance or behavior.  **Exceptional** – Employee consistently exceeds the majority of performance expectations and goals, and demonstrates judgment and behaviors commensurate with their position within the laboratory. The expected behaviors include a high level of proficiency regarding judgment, interpersonal and communication skills, and other competencies required in their job. | | | | |

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| **Employee and line manager review the following items together and initial upon review.** | | |
| **Initial each item** |  |
| **JB** | **I have reviewed the** [**Commitment to Safety and Environmental Stewardship**](http://thesource.nrel.gov/esh/commitment.html) **and reviewed my ESH training requirements with my line manager.** |
| **JB** | **I have reviewed my required training plan with my line manager and have submitted necessary changes to** [**institutionaltraining@nrel.gov**](mailto:institutionaltraining@nrel.gov)**.** |
| **JB** | **I have discussed** [**NREL’s Ethics Handbook**](https://highpoint.nrel.gov/sites/iop/Documents/gen/fy21/77850.pdf) **with my line manager and understand my responsibilities in these areas.** |
| **JB** | **I have discussed cybersecurity requirements, including personally identifiable information, and physical security requirements, such as visitor access and control issues, with my line manager and understand my responsibilities in these areas.** |

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| 1. **Employee Comments (Optional)** |
| Working with Mark and the MIIA group has been enjoyable and fulfilling. I look forward to another successful and exciting year of collaboration. |

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| 1. **Signatures** |

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| **Employee:** | **Justin Bracci** |  | **Date:** | **11/8/2024** |
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| **Employee’s Line Manager:** | **Mark Chung** |  | **Date:** | **11/1/2024** |

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| **Reviewing Manager:** |  |  | **Date:** | **12/16/2024** |