Leading the way in Nuclear Information and Records Management

Inside NIRMA magazine

Visit us at: NIRMA.org

2024 Board of Directors Accomplishments

A Year of Milestones and Achievements!

SOC 2 Type 2 Certification for nextScan and ST Imaging

Evolution of Quality Record Management, NextAxiom

Issue # 22, Spring 2025

CONTENT

NIRMA

Cover Stories

Other Features

in every issue

Letter from the Editors

We at *Inside NIRMA*, value your opinion and are always looking to improve our magazine. Let us know what you like and dislike and what you'd like to see more of. Share your thoughts with our Communication Team at DevereauxInc@outlook.com.

If you haven't already done so, please take a moment to follow NIRMA on X (formerly Twitter) and Instagram, like NIRMA on Facebook, and connect with NIRMA on LinkedIn.

Thanks for reading. Please keep in touch!

Neal and Sandra Miller

Editors

Editors
Neal and Sandra Miller
DevereauxInc@outlook.com

Advertising
Neal.F.Miller@gmail.com

NIRMA Headquarters
Sarah Perkins
NIRMA Administrator
nirma@nirma.org

In addition to our own articles, *Inside NIRMA* publishes guest articles from agencies and vendors. Please be advised that the views and opinions expressed in these articles are those of the authors and do not necessarily reflect the opinions of NIRMA or its Board of Directors.

MESSAGE FROM THE BOARD

2024 Board of Directors Accomplishments

A Year of Milestones and Achievements

The 2024 Board of Directors has concluded an exceptionally productive year marked by significant achievements and impactful decisions that will shape the future of our organization. This article highlights the key accomplishments of the board, celebrating the dedication and hard work that has driven these successes.

Approved New Symposium Location for 2025

One of the standout decisions made by the board this year was the approval of St. Augustine, FL, as the location for the 2025 Symposium. Known for its historic charm and vibrant cultural scene, St. Augustine promises to be an inspiring and enriching setting for the 2025 gathering. This decision underscores our commitment to selecting venues that not only meet logistical needs but also provide a memorable experience for attendees.

ANSI Reaccreditation and Approval of AP13

In a testament to our ongoing commitment to excellence, the board successfully secured reaccreditation as an ANSI Standards Development Organization along with the approval of AP13 Rev 10. This reaccreditation reaffirms our role in setting and upholding high standards within the industry, ensuring that our practices remain at the forefront of innovation and quality. A special thank you to Rich Giska for his continued, unwavering support and leadership of the ANSI/NIRMA CM Standard.

Launch of the NIRMA Scholarship Program

Recognizing the importance of fostering the next generation of industry leaders, the board approved the NIRMA Scholarship Program. This initiative aims to support students pursuing careers in our field, providing them with financial assistance and encouraging academic excellence. The scholarship program is a significant investment in the future of our industry.

Correction of Titles in NRC RG 1.28

At the request of NIRMA, the NRC corrected titles in RG 1.28. This correction ensures accuracy and clarity in regulatory documents, reflecting our commitment to precision and professionalism in all aspects of our work.

Formation of the New Plant Construction Special Interest Group (NPC-SIG)

The board approved the formation of the New Plant Construction Special Interest Group (NPC-SIG). This group will focus on the unique challenges and opportunities associated with new plant construction, providing a platform for collaboration, knowledge sharing, and innovation within this critical area of our industry.

Secure Storage of NIRMA Records

In a move to enhance the security and accessibility of our records, NIRMA records stored at South Texas Project (STP) have been securely transferred to AMS Store and Shred, LLC. This transition ensures that our records are maintained in a secure environment, safeguarding vital information and facilitating efficient record management.

Recognitions Awarded

The board celebrated the achievements of several outstanding individuals within our organization through a series of recognitions:

- Lona Smith - Lifetime Achievement
- Janice Hoerber - Lifetime Achievement
- Jessica Jones, CRM/NS - Certificate of Recognition (NIRMA Scholarship Program)
- Christine Spring - Certificate of Recognition (NIRMA Scholarship Program)

These awards honor their exceptional contributions and dedication, highlighting the impact they have made on our organization and the industry as a whole.

Symposium Awarded CMP Credits

The Symposium was awarded 17 Certification Maintenance Points (CMP) from the Institute of Certified Records Managers (ICRM). The number of CMPs awarded reflect the high quality and educational value of the sessions and workshops offered. CMPs are important and may be required to maintain professional certifications. This recognition underscores our commitment to providing valuable professional development opportunities for our members.

2025 Board of Directors

L-R: Director of Infrastructure Lona Smith, Vice President Kathi Cole CRM, Secretary Stephanie Price, Treasurer Gil Brueckner CRM/NS, President Bruce Walters CRM/NS and Director of Technical Programs Lou Rofrano

Updated Member Q&A Site

In response to member feedback, the board announced the launch of an updated member Q&A site. This platform enhances our communication and engagement with members, providing a user-friendly interface for accessing information, asking questions, and sharing insights.

Approval of AP07 & AD01

The board approved AP07 & AD01, further streamlining our processes and ensuring that our policies remain current and effective. These updates are part of our ongoing efforts to enhance organizational efficiency and governance.

Transition to QuickBooks

In a significant modernization of our financial reporting system, the board oversaw the transition to QuickBooks. This move enhances our financial management capabilities, providing greater accuracy, transparency, and efficiency in our reporting processes.

ICRM Nuclear Specialist Certification Update

For the first time in five years, the ICRM Nuclear Specialist Certification was updated. This update reflects the latest advancements and best practices in the field, ensuring that our certification remains relevant and highly regarded.

Technical Advisor Agreement with Diane Stelken

The board signed an agreement with Diane Stelken to serve as our new Technical Advisor. Diane's expertise and experience will be invaluable in guiding our technological initiatives and ensuring that we leverage the latest innovations to benefit our organization and members.

In conclusion, the 2024 Board of Directors has achieved remarkable milestones, demonstrating their unwavering commitment to advancing our organization and the industry. Their strategic decisions and forward-thinking initiatives have set the stage for continued success and growth in the years to come.

SYMPOSIUM CORNER

In less than six months, we will be gathering again for the **2025 Nuclear Information and Records Management Symposium (July 28-30, 2025), now to be referred to as NIRMA 25 SYMPOSIUM,** at the World Golf Village Renaissance St. Augustine Resort, in St. Augustine, FL. And as always, the Symposium registration fees include the 2026 membership fee.

The Call for Papers has been published in the January and February editions of our monthly email and is also available on our website under the SPEAK tab (click *here*). I encourage you to register as a speaker for a discount, share your experiences, and educate the rest of us. As we witnessed in 2024, we have a lot of knowledgeable members in NIRMA, with some new folks coming from as far as the United Arab Emirates. As a speaker, you will have an audience who will appreciate you taking that leap of faith. Give being a teacher and a learner a try this year. A list of possible topics is included on the Call for Papers. Case Studies are fantastic because they are actual experiences that colleagues are sharing, whether a project or process went quite well or horribly wrong. We can always learn from each of our successes and failures. Please share yours.

We plan to continue offering a Fundamentals track for newbies, advanced tracks for the seasoned vets, and breaks for short networking opportunities, all in order to incorporate what you have come to expect educationally at the symposium.

We have invited nearly two dozen of our exhibitor contacts to attend the Symposium and will have an Exhibitor Hall just as we have had in past years. And as is routine, we will host a Networking Reception with them at the end of the day on Tuesday. If you are an exhibitor and want this opportunity, please contact Sarah at nirma@nirma.org to register.

We continue to look for companies to sponsor events such as meals or after-hour receptions. Your company will be recognized on our website and at the symposium.

For planning purposes, know that:

- Business Unit meetings, including a SIGET working group, will be held all day Thursday, July 31.
- RIMBU may continue on Friday morning, August 1.
- The Board is also working on a pre-Symposium Sunday Outing, so you may want to arrive in time to join in. We are also working on arranging discounted tickets for many of the great attractions in St. Augustine.

Please schedule your trip to St. Augustine to include arriving early to enjoy the pre-Symposium outing and the beautiful beaches in the area, and stay an extra day (plus) to attend these important meetings after the Symposium ends.

On the NIRMA website under the Annual Symposium tab (click *here*) are links to register for the Symposium, to Speak, to Sponsor, and to reserve your hotel room. The World Golf Village Renaissance St. Augustine Resort offers a limited number of rooms at the discounted Symposium rate, so you might want to reserve your room soon.

Our discounted room block ends on July 1!

We are hoping to share with you updates on the NIRMA Scholarship Program and to announce our first scholarship awardee.

Last year was a spirited event, as colleagues got to reconnect and learn, plus we had 37 first-timer attendees who jumped right into it. We are working to improve upon the experience and to offer more opportunities for our attendees, exhibitors, and sponsors for the NIRMA 25 Symposium. You really will want to join us. The entire Board plans to be there in July and can't wait to greet you.

NIRMA SCHOLARSHIP ANNOUNCEMENTS

By Jessica Jones, CRM/NS and Christine Spring
PDBU Chairman PDBU Co-Chairman

NIRMA is proud to announce the NIRMA Scholarship webpages are live! Click Here to visit the website.

We have information about the NIRMA Scholarship for both applicants and donors.

We are so thankful to all of our Donors and we are happy to showcase that our Digital Donor Wall is live. This scholarship would not be possible without our generous donors. If you would like to donate, you can submit a Donor Form.

We are also now accepting applications for the NIRMA Scholarship!

The deadline to submit all materials is March 17th.

Please share the scholarship information with anyone you think might be interested. NIRMA members are eligible to apply for the scholarship if they meet the eligibility requirements. Applications are accepted through the website. To obtain a PDF of the application, please email nirma@nirma.org. The NIRMA Scholarship award is $1000 USD!

Additionally, the winner of the scholarship will be invited to this year's symposium as a guest. This will include free registration, hotel, and travel allowance. It is not mandatory that the winner attend the symposium for them to win the award. For more information see the Applicant Information webpage.

If you would like to be involved in building this scholarship, please contact Professional Development Business Unit (PDBU):

- Director Jessica Jones, jljones22@tva.gov or
- Co-Director Christine Spring, Christine.Spring@vistracorp.com

We will be sending out a request for NIRMA members to volunteer as essay graders as we approach the application deadline. You do not need to be a part of the Scholarship Committee to be a grader.

A BIG THANK YOU to all our NIRMA members, donors, and the Board for the support and enthusiasm you have shared about the NIRMA Scholarship.

NIRMA 25 SYMPOSIUM

July 28-30, 2025
World Golf Village
Renaissance St. Augustine Resort
St. Augustine, FL

CLICK HERE TO REGISTER

nextScan

THE BEST JUST GOT BETTER

Introducing the next generation of multi-format conversion scanning, the FlexScan+ from nextScan.

Microfilm | **Microfiche** | **Aperture Cards**

The only true multi-format conversion package that delivers high-speed precision scanning with unique custom software applications that enable enhanced and powerful scanning capabilities.

INCREASE EFFICIENCY

Simultaneous Scan, Audit, Index, and Output for increased efficiency.

EXPAND PRODUCTIVITY

Enable maximum workflow with 5 standard workstations. Optional remote capabilities.

FINE DETAIL NATIVE IMAGE RESOLUTION

High precision optics combined with proprietary lighting technology deliver unmatched native image resolution quality.

Auto-Focus

Streamline workflow with a hands-off approach with auto-focus technology. No need for adjustments, the FlexScan+ captures each image clear and legible.

Reliable Image Capture

Ribbon scanning technology from nextScan ensures media is scanned top-to-bottom, and end-to-end, capturing every piece of information on the film.

High-Resolution Images

Proprietary lighting combined with LUMINTEC® technology and high-precision optics capture raw detailed images, expanding the ability to see fine details within the original record.

208.514.4000 | sales@nextscan.com | www.nextscan.com | Follow Us :

SOC 2 Type 2 Certification for nextScan and ST Imaging

By Matt Anderson
Vice President of Sales and Marketing, nextScan

With the sensitive nature of nuclear records, ensuring the secure and confident digitization is of the utmost importance for record managers. When evaluating your digitization options, making sure your business partner is certified and compliant with current regulations is essential.

Digital Check Corp., including its divisions ST Imaging and nextScan, has been certified as System and Organization Controls (SOC) 2 Type 2 compliant in accordance with the standards established by the American Institute of Certified Public Accountants (AICPA). These include the availability and confidentiality criteria, in addition to the security criteria, the company announced. The certification covers all corporate systems, as well as nextScan's microfilm conversion application, nextStarPLUS™ and ST Imaging's PerfectView software for digital microfilm reading.

"By its nature, microfilm reading and digitization is a data-intensive business, and a small but significant amount of that data could be considered sensitive," says Rich Chaney, vice president and general manager of ST Imaging and nextScan. "It's important for our clients to know they can trust us with that information, and that we follow the same high standards for protecting it regardless of whether it's in physical or digital format."

"It's important for our clients to know they can trust us with that information, and that we follow the same high standards for protecting it regardless of whether it's in physical or digital format."

Meeting SOC 2 Type 2 standards requires a comprehensive audit of an organization's systems and procedures over a period of at least six months. The ST Imaging and nextScan software certifications in particular represent a key milestone for the business units.

"It's easy to think of a digital microfilm scanner as a piece of physical hardware, but the software that displays or converts the data is just as important to the process, if not more important," Chaney says. "When we work with sensitive information for government agencies, or with archives that contain confidential company or personal data, we follow industry best practices and take the job seriously."

To learn more about nextScan microfilm conversion scanners or ST Imaging on-demand microfilm viewer and scanner, please visit www.nextscan.com and www.stimaging.com.

Computer Guided Work

Transform the way all work is performed

across the entire enterprise

Integrated Forms | **Computer Guided Procedures** | **Dynamic Workflows**

NextAxiom Dynamic Work Execution Platform

Digitalize any business process: EWP, EC, Supply Chain, HR…

NextAxiom®

www.nextaxiom.com

Evolution of Quality Record Management

By Mitchell S Burke - CSSBB, PMP Project Management Consultant at NextAxiom

For decades, industries reliant on strict regulatory compliance, such as nuclear energy, have struggled with the burden of managing quality assurance (QA) records. These records are essential for ensuring safety, meeting regulatory requirements, and maintaining operational excellence, yet traditional methods of creating, storing, and retrieving them have been cumbersome, time-consuming, and prone to error. As technology has advanced, so too has the approach to record management, moving from paper-based systems to digital solutions designed for accuracy, efficiency, and security. This evolution has reshaped how organizations handle QA records, making way for automated, integrated systems that eliminate inefficiencies and reduce compliance risks.

NextAxiom's Dynamic Work Execution Platform (DWEP) is a suite of products that includes dynamic workflows, integrated forms, and guided instructions all on a platform designed for continuous improvement. DWEP represents a transformative advancement in organizational efficiency, redefining how work is performed by integrating Digitalized Work™ principles. At its core, Digitalized Work™ is the concept of computer-guided tasks seamlessly connected to enterprise systems, providing real-time guidance, tracking, and measurement. By equipping employees with relevant information and automating transactions, DWEP dramatically reduces the likelihood of human error, streamline operations, and often fully automates work processes.

One of the key areas transformed by DWEP is the creation and storage of QA records. These records, integral to maintaining compliance and operational

With DWEP, tasks that once required significant manual effort are now seamlessly integrated in automated workflows that allow things like QA records to be automatically created, organized and stored in accordance with organizational business rules the moment work is completed.

Continued on page 12.

Continued from page 11.

excellence, have historically been labor-intensive to produce and manage. The evolution of quality record management has a rich history tied to regulatory advancements, underscoring the importance of meticulous documentation to ensure safety and compliance.

In 1970, the introduction of 10 CFR Part 50, Appendix B, established comprehensive QA requirements for nuclear power plants and fuel reprocessing facilities. This regulation was designed to ensure that all safety, design, construction, and operational activities were well-documented, and that evidence of compliance was readily available for review. Over time, the regulatory framework adapted to industry needs, reflecting technological advancements and the shift from paper-based to digital systems.

In the late 1990s and early 2000s, regulatory documents such as NUREG-0980 and NUREG-1718 formally acknowledged electronic QA records. Updates to Regulatory Guide 1.88 introduced provisions for digital storage, aligning with ANSI/ASME NQA-1 standards, which set the benchmark for QA programs, including the management of electronic records. These digital systems were required to ensure integrity through robust access controls, audit trails, and secure backups, guaranteeing that records remained reliable and tamper-proof.

As digital systems became more prevalent, cybersecurity considerations emerged as a critical aspect of compliance. Regulatory Guide 5.71 addressed these challenges, providing guidelines for protecting digital systems from cyber threats and ensuring that QA records remained secure from unauthorized access. Additionally, technologies such as digital signatures and blockchain gained acceptance, enhancing the security and authenticity of electronic records. The Nuclear Regulatory Commission (NRC) further modernized compliance processes by allowing electronic submissions of QA records through the Agencywide Documents Access and Management System (ADAMS), streamlining workflows while maintaining traceability and compliance.

DWEP fully embraces and automates these advancements, delivering a comprehensive solution that redefines how QA records are managed. The platform eliminates the need for manual review and processing of paper-based work orders, instructions, and procedures. It replaces labor-intensive tasks such as organizing stacks of paper, stripping non-applicable content, writing and attaching cover sheets, and scanning and storing documents. With DWEP, backlogs become a thing of the past, as QA records are automatically created, organized, and stored in accordance with organizational business rules the moment work is completed.

The record management time savings realized through DWEP are substantial. Tasks that once required significant manual effort are now seamlessly integrated into automated workflows.

The record management time savings realized through DWEP are substantial. Tasks that once required significant manual effort are now seamlessly integrated into automated workflows. The platform ensures that all QA records comply with regulatory and organizational requirements, providing organizations with a higher degree of confidence in their compliance efforts. By automating the entire process, DWEP not only enhances operational efficiency but also frees employees to focus on more strategic and value-added activities. DWEP is not just a tool; it is a transformative enabler of modern, efficient, and compliant operations.

NARA ISSUES NEW BULLETIN

By Helena Gilbert, CRA, NRC Agency Records Officer

Metadata Guidance for the Transfer of Classified Electronic Records

The National Archives and Records Administration (NARA) issued a New Bulletin on January 30, 2025 on Metadata Guidance for the Transfer of Classified Electronic Records.

The new bulletin can be found here: Metadata Guidance for the Transfer of Classified Electronic Records.

This bulletin provides guidance on security classification metadata that must accompany transfers of permanent classified electronic records to the National Archives. This metadata documents the access restrictions, review and declassification, and other metadata elements for classified records.

This bulletin builds on the guidance in NARA Bulletin 2015:04: Metadata Guidance for the Transfer of Permanent Electronic Records. The bulletin 2015-04 guidance also applies to permanent classified electronic records.

NARA has also updated their webpage with metadata requirements for permanent records to include the new classified metadata elements.

If you have questions about this bulletin, please send an email to rmstandards@nara.gov.

Treasurer Report

Gil Brueckner, CRM/NS, NIRMA Treasurer

NIRMA's Financial Holdings

as of February 10, 2025

Checking Account	**$ 42,974.41**
Investment Account	**$113,456.22**
Debit	**$ 300.47**
Scholarship Account	**$ 7,218.00**

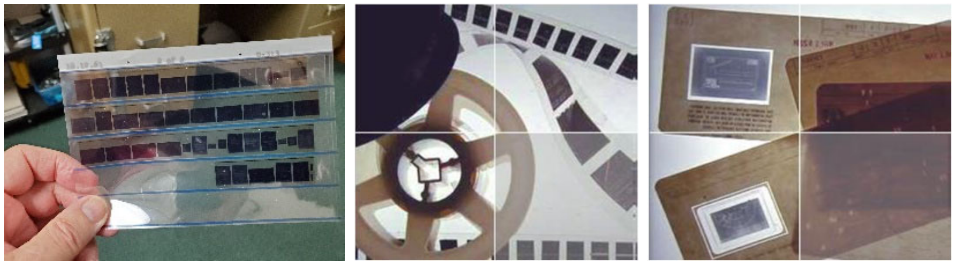
ISAUSA, INC.

Integrated Scanning of America

Innovating Document Capture Since 1993

Digitize large volumes of:

Microfiche
Microfilm
Aperture Cards



… without shipping originals out
… without adding new burden to your staff
… without sacrificing quality or increasing costs

- ✓ **Streamlined, Simplified Capture Phase:** Local temps or client staff safely operate the equipment.
- ✓ **Expert Post-Capture Management:** All complexities are handled remotely by our professionals.
- ✓ **Cost-Effective & Secure:** Maintain control over your documents while reducing operational strain.

Do what you do best, let the experts do the rest!

CONTACT: https://isausa.com/contact

Isausa, inc.
2363 Teller Rd # 102. Newbury Park, CA 91320
(805)375-0422
sales@isausa.com www.isausa.com

OUTSMARTING LARGE VOLUME MICROFORM DIGITIZATION PROJECTS

Part 1 of 3: Prepping Microfilm Rolls

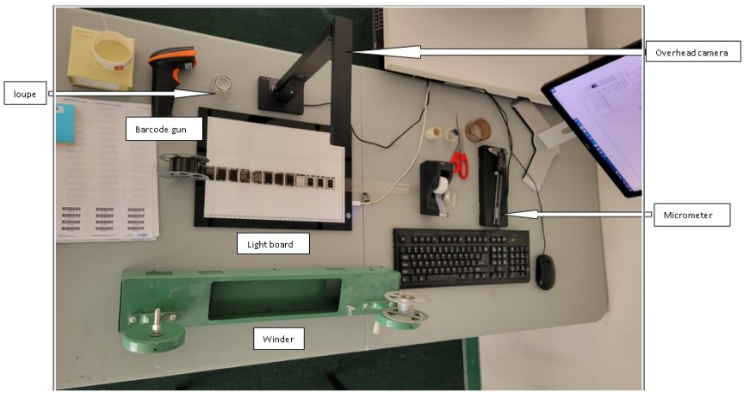
ISAUSA, INC. | Integrated Scanning of America

By Manuel Bulwa – ISAUSA, Inc.

Digitizing hundreds or even thousands of microfilm rolls presents significant challenges. Critical errors may go unnoticed, and costs may skyrocket. This article outlines proven methodologies to minimize errors and omissions without breaking the bank.

Organizing for Success

The image below illustrates resources used to efficiently prepare microfilm for scanning:



This film prepping table (above) contains all essential tools to perform tasks such as: Appending blank leaders and/or trailers when needed; Cleaning dust and separating stuck film segments; Labeling rolls with barcode stickers; Cataloging each roll in the system; Documenting anomalies found in the film; Flagging rolls that do not end with an "END" target frame; Classifying film types in groups (e.g., 16mm, 35mm, duplex, blipped, etc.); Recording observations of any irregularities; Optimizing image scaling; Preventing premature "end-of-roll" conditions; stitching broken film, and more.

Each roll container (box) is assigned a unique id through a barcode sticker. Each box is photographed using an overhead camera, capturing both the label and barcode sticker. The production software then ingests these images, recognizes barcode data, links the roll to the client's manifest, and generates a reliable inventory. A report is then created showing possible discrepancies between the user supplied manifest and the inventory just created. The barcodes may also be recognized using the barcode wand if necessary. Additionally, we capture a representative segment of the roll content using the overhead camera (or smart glasses, cell phone, or digital camera), assisted by the lit lightboard.

Once ingested by the production software, we use the mouse to trace a green line across the film width, and a red line to represent the reference frame longest side.

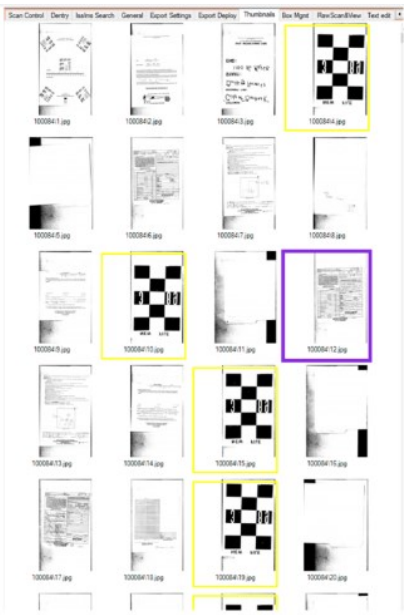
Continued from page 16.

ISAUSA, INC.

Continued from page 15.

These two measurements are used by the production software to compute optimal image scaling and resolution resampling, aiming at full compliance with service level agreements, regardless of how the film will be digitized. The micrometer may be used for manual calculations if answers are required before the software does everything automatically.

So far all we have done is to get organized, but now we need to start true production. Obviously, we will scan in groups by film type to reduce time spent changing scanner setups and to improve load balancing, if we run parallel scanning stations. Still, each roll resides inside a Pandora's box, or a Forest Gump box of chocolates, i.e. *you never know what you're going to get*. A roll can contain hundreds or thousands of frames with:

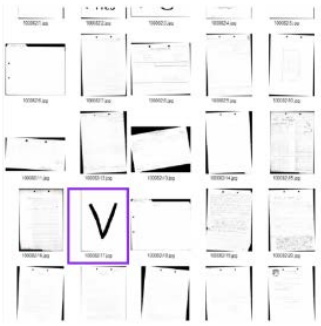


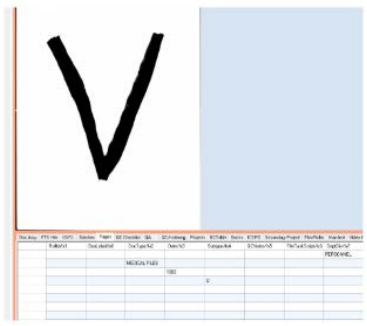
- Extreme density variations in exposure.
- Improvised target sheets.
- Cryptic patches and handwritten amendments.
- Non-blipped film, making it harder to identify document structures and breaks.

To address these issues, we must identify structural patterns.

Detecting Document Structure in Challenging Film

We can use traditional computer vison tools to compare image similarities and detect possible structure breaks. Given the anticipated poor and inconsistent filming quality, we cannot expect viable results from OCR (Optical Character Recognition), which could have been invaluable for our purposes.





A manual brute-force approach - visually scanning thumbnails - can still be useful. Though labor-intensive, it helps uncover key details such as:

- Department/Division
- Document Type
- Date or Date Range
- Document Breaks or Subtypes

Luckily, modern artificial intelligence (AI) tools now provide much better tools to perform small miracles for our purposes.

In practice, we can combine all three approaches above to capture structural information that will help fine tune indexing and validation specs. More importantly, it clears the way to an optimal production workflow.

Separation of Capture from Production Workflow

I firmly believe that the capture process should remain distinct from the production and quality control (QC) workflow. Why? Because:

- ✓ Capture should be simple and efficient, handled by clerical staff or temporary workers. It should require minimal operator expertise and minimal supervision.
- ✓ Experts should focus on QC and post-processing, rather than on the raw scanning process.

Our methodologies have proven effective in scaling large projects, with clerical staff operating scanning equipment around the clock in three shifts, while expert teams remotely supervised quality and integrity.

A cloud-based production software is used to enable collaboration between equipment operators and remote experts, allowing for:

- Simplified, constrained capture operation.

NIRMA 25 SYMPOSIUM

July 28-30, 2025
World Golf Village Renaissance St. Augustine Resort
St. Augustine, FL

CLICK HERE TO REGISTER

- Efficient post-capture processing.
- Robust QC/Repair.
- Optimal distribution of talents and responsibilities.

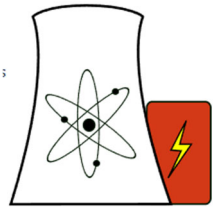
Conclusion

Strategic preparation is crucial for large-volume microfilm digitization. By following creative methodologies, leveraging automation, and maintaining a clear separation between capture and post-processing, we can:

- ✓ Minimize errors and omissions.
- ✓ Increase efficiency without inflating costs.
- ✓ Ensure high-quality digital outputs that meet client expectations.

Nick Touran's

What is Nuclear?



What about Hanford?

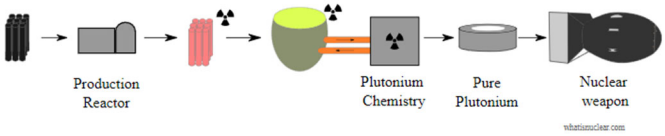
By Nick Touran, Ph.D., P.E.

One thing people often turn to in discussing nuclear energy a clean energy source is the Hanford Site along the Columbia River in central Washington. Here, you'll learn about what happened at Hanford, why there's a large cleanup project today, and that it is largely unrelated to commercial nuclear energy.

How did the Hanford site get started?

During the Manhattan Project in World War 2, American scientists knew of two potential ways to make materials that would explode as nuclear weapons: enriching uranium to nearly 100% ^{235}U or producing plutonium in special nuclear reactors. Since they didn't know which one would work, they tried both. Enrichment facilities were built in Oak Ridge, Tennessee, and special plutonium-producing reactors were built at Hanford, WA. Both approaches ended up working. After that and into the Cold War, weapons production capabilities grew at Hanford, and at least 9 weapons production reactors operated there through the years.

What happened to Hanford?



The plutonium-production process that occurred at Hanford involved irradiating nuclear fuel in a reactor, melting it down in a big acid vat, using chemistry to extract just the plutonium, and fabricating the plutonium into weapons. The giant vats of liquid radioactive acid were a waste product and dealing with them was not the priority of the Cold War (keeping up with the USSR was). So instead of implementing a nice waste-treatment process, the vats just sat there and the sludge was left for later generations. That's what we're dealing with now.

Does this mean we shouldn't do commercial nuclear?

Of course not. Rather than melting down spent fuel and putting it in a vat, today's commercial nuclear plants put their irradiated fuel in extremely solid and safe dry cask storage where there is no risk of anything radioactive leaking out. The spent fuel is solid, after all. The leaks at Hanford are unrelated to commercial nukes.

What about reprocessing?

There are some benefits to recycling used commercial nuclear fuel, such as reducing the total amount of nuclear waste and using our resources more efficiently. To do this, you do need to melt the fuel down and do some degree of purification, similar to what happened at Hanford. The difference is, well-designed reprocessing facilities like La Hague in France include a stable waste form (e.g. vitrification) from the beginning. If you think it through, you can reprocess cleanly and safely. In haste of WW2 and the Cold War, waste forms were an afterthought.

See Also:

- Hanford Site (Wikipedia) — many more details about Hanford
- La Hague Site (Wikipedia) — a commercial nuclear fuel reprocessing facility in France that operates well.
- Our page on Nuclear History
- Our nuclear recycling/reprocessing page
- Our weapons and non-proliferation page

Regulations and Information Management Business Unit (RIMBU) News

Rhonda Redding, RIMBU Director

The end of 2024 and beginning 2025 has been a busy time for the RIMBU team.

Technical Guidelines and White Paper Updates

We have reaffirmed TG11-2018, "Authentication of Records and Media", TG16-2017, "Software Quality Assurance Documentation and Records", and TG21-2020, "Required Records Protection, Disaster Recovery and Business Continuation", and approved White Paper "Artificial Intelligence"

Additionally, the team has been reviewing TG15, "Electronic Records" and white paper, "Exchange and Management of 2D and 3D Electronic Data"

Special Meeting

The RIMBU team met January 14, 2025, to align and vote on a recommendation for sharing NIRMA documents with outside agencies or organizations. The team voted and passed to develop a proposal to be presented to the NIRMA board to allow White Papers, Position Papers, and Program Descriptions to be shared with outside agencies or organizations. Stay tuned.

RIMBU 2025 Spring Meeting

The RIMBU team will hold the annual Spring meeting on April 1st and 2nd in Kansas City, Missouri, hosted by Evergy / Wolf Creek Nuclear Operating Corporation. A Survey Monkey will go out to all members to identify in-person attendance. Please take the time to answer the Survey so we can plan accordingly.

The Spring meeting is open to all NIRMA members. RIMBU is a great opportunity to benchmark with others in the industry, share valuable operating experience, and can influence industry standard guidance in records management. Looking forward to seeing you there. If you're interested in joining the RIMBU team, please reach out to me at rhonda.redding@evergy.com.

Not a NIRMA Member? Click *here* and join TODAY!

PROFESSIONAL DEVELOPMENT BUSINESS UNIT (PDBU) NEWS

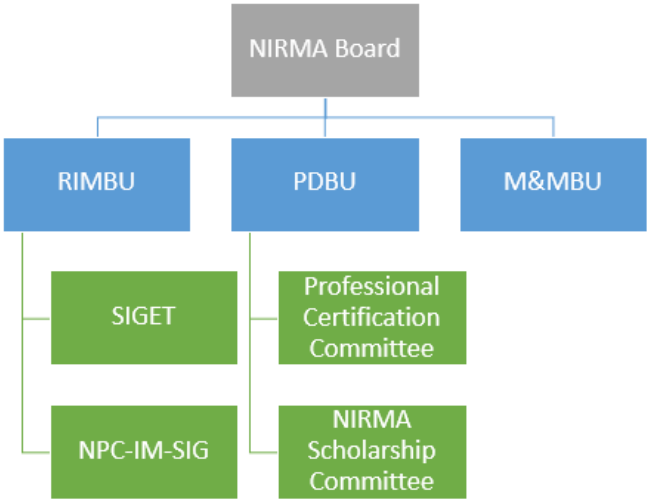
By Jessica Jones CRM/NS, PDBU Director and
Christine Spring, PDBU Co-Director

Brrr!! What a way to start 2025!! Much of the country is currently under very cold and freezing temperatures. This keeps many of us indoors and not so busy as the rest of the year. What a great time to review our own personal professional development roadmaps.

Professional development is defined as the process of learning new skills and knowledge to advance in your career. It can involve taking classes, attending conferences, or collaborating with a mentor. But if you are like many of us, this process can look daunting. Where do you start? How do you start? NIRMA can be a wonderful place to start your journey of professional development.

NIRMA has three business units you can join that will introduce you to the exciting happenings in our industry.

- Regulations & Information Management Business Unit (RIMBU)
- Membership & Marketing Business Unit (M&MBU)
- Professional Development Business Unit (PDBU)



Each of these business units offer insights and information into the world of Nuclear Information and Records Management. All the business units are interested in welcoming new members and new insights.

Interested in the regulations and technical guides, and industry best practices that govern records management? RIMBU is the place to start!

Looking to be involved in shaping the future of records in emerging industries? RIMBU also has two special interest groups, the Special Interest Group on Emerging Technologies (SIGET), and Nuclear Plant Construction Information Management Special Interest Group (NPC-IM-SIG).

Want to help reach other RIM professionals? M&MBU is your go to!

Lastly (and honestly my favorite), do you want a mentor, be a mentor, learn about becoming certified as a records analyst or manager or nuclear specialist certification, help build the NIRMA Scholarship, or organize and attend informative webinars with the industries leaders? The PDBU is your home to all of that!

PDBU has two committees that help move important initiatives forward! The Professional Certification Committee (PCC) comprised of professionals who have achieved their CRM/CRA Nuclear Information and Records Specialist (NS) credentials and work to maintain the exam test bank, resources, and interface with the Institute of Certified Records Managers (ICRM). The NIRMA Scholarship Committee is open to everyone and focuses on developing and administrating the NIRMA Scholarship.

All NIRMA members are welcome and encouraged to get involved with any of the Business Units, just email your expression of interest to nirma@nirma.org to get connected!

We invite you to go to the NIRMA website and look around. On the member site you can access the TEAM rooms to see what each Business Unit is currently working on or what they are offering in the future. You can view the speakers and presentations from the past NIRMA Symposiums, pose questions for benchmarking with other Nuclear RIM professionals, browse through the most recent NIRMA magazine (as well as older editions), and connect with our advertisers if you are interested in upgrading your systems or equipment.

Taking the next step, or even the first step, in your personal professional development story does not have to be daunting or overwhelming. The RIM professionals that make up the NIRMA family are here to help, advise and encourage you on your journey. So open that first page in your development story and know that NIRMA is here to help you!

Get Connected!

NIRMA

Follow us
@NIRMAorg

Industry News!

Utility Survey Spotlights Urgent Need for NRC Efficiency

By Doug True

The U.S. is unquestionably in the midst of an unprecedented period of electricity demand growth that must be met to power our economy and our national security. Not surprisingly, the demand for the reliable, clean energy that nuclear provides has led to a significant near-term need to increase the output of our operating fleet and deploy new nuclear power plants.

In late 2024, NEI surveyed our utility members on their plans to expand their nuclear generation with eye-popping results:

- Three-quarters of the industry is interested in increasing the output of existing reactors, with more than 3,000 MWe of new output already planned.
- Roughly half of plants are interested in extending the time between plant refueling shutdowns, enabling the equivalent of roughly 600 MWe of new generation per year.
- Efforts are underway to restart two plants that had permanently ceased operations and evaluate whether to restart a third, potentially adding the equivalent of more than 2,200 MWe of new output.
- More than a dozen permits are expected to be initiated for new reactors by the end of the decade, with members anticipating needing over 100,000 MWe of new nuclear power by the 2050s.
- Virtually every operating plant will seek approval to operate for at least 80 years.

While all of this paints an optimistic picture for the increase in the production of clean and reliable nuclear power, the road to achieve these runs right through the Nuclear Regulatory Commission (NRC), since each action requires approval by the NRC. The survey showed that, compared to the past decade, the expected number of license applications that will be submitted to the NRC will double.

Keep in mind that this survey was limited to utilities that currently operate nuclear power plants and does not account for the surging interest from other utilities and customers across the country that will generate an additional wave of work for the NRC. This new, near-term demand stems from industrial customers, such as oil and gas, interested in reliable process heat and electricity, data centers, artificial intelligence hyperscalers, mining, and marine shipping.

NRC Modernization in the Spotlight

The NRC has a well-earned global reputation as the gold standard of independent safety regulators, but NRC's legacy requirements and processes for reviewing and approving applications are often ponderous and in need of modernization. While the NRC has made some recent progress on specific projects, significant modernization of the agency MUST be a top priority for the nation. Nuclear energy is the most reliable, resilient and scalable source of energy available today. The processes of the past will impede the pursuit of U.S. energy dominance that is so important both domestically and geopolitically.

Timelines for NRC approvals have typically been on the scale of multiple years, if not a decade. This pace will not support the needs of the U.S. economy, nor our national security interests. We do not have decades to address this.

NUCLEAR ENERGY INSTITUTE

Article reprinted with permission of NEI. Read full article *here*.

Industry News!

Utility Leaders Urge Rapid Action, Innovation to Meet Energy Demands in 2025 & Beyond

By Kim Riley

The future of electric utilities hinges on decisive action, accelerated innovation, and strategic investments, according to utility leaders and energy experts discussing the challenges and opportunities ahead in 2025 during a press briefing held Jan. 15 by the United States Energy Association.

The conversation included the pressing need to balance immediate energy demands with long-term grid resilience and modernization.

"The answer would be [to] build everything you can as fast as you can. The supply chains are lengthening," said Duane Highley, CEO of the Tri-State Generation and Transmission Association. "We're going to need some gas in the mix to make it all happen, even as we build massive amounts of renewables. So I'd say just move as fast as you can today."

Karen Wayland, CEO of the GridWise Alliance, said utilizing local resources is crucial to help manage demand growth.

"We have to definitely build more, but we have to expand the capacity of the existing systems that we have and that's both the transmission system and at the distribution level," Wayland said. "But while we're waiting for that transmission to be built, they can't wait in order to service the new load that they're experiencing.

"Many utilities are looking much more closely at local resources… that are within the distribution system that can provide those electrons to service the demand," she said. "So that is most certainly looking much more closely at behind -the-meter resources that are on the customer side in addition to the larger scale generation that we've come to associate with what is providing our electricity."

Maria Pope, CEO of Portland General Electric (PGE) and chair of the Edison Electric Institute, noted PGE's efforts to source 25 percent of its capacity from behind-the-meter and distribution system resources. These local solutions are critical as utilities navigate delays in large-scale infrastructure projects, she said.

"With the growth that we do have and we're seeing, it's quite remarkable that we're able to deal with the reliability and resiliency issues and with the growth of demand and new infrastructure, as well as deal with extreme weather conditions," said Pope. "All of those things combined allow us to build back a grid that is smarter, more effective, more efficient, cleaner by taking multiple problems that we are solving and accelerating the pace of change — building a lot and building smartly and building more effectively and efficiently than we have in the past."

Experts also discussed navigating the challenges of resource adequacy now and into the future.

Ted Vatnsdal, executive director of strategy and risk management at the Midcontinent Independent System Operator (MISO), pointed out that increasing retirements of coal and gas plants, coupled with surging demand, are pushing the system to its limits.

MISO is focusing on the immediate attributes of the system in the future, he said, adding that of the 6.8 gigawatts that MISO added in 2024, a lot of it was solar.

"Solar has great attributes, in particular around sustainability, which matches up with what a lot of our members are wanting their power supply to look like," said Vatnsdal. "But we're going to need that dispatch ability, we're going to need the attributes that we get currently from natural gas and from our coal fleet."

He also noted that the retirement of coal plants is a challenge that's "really at the forefront of our conversations."

DEI DailyEnergyInsider
Your Resource for Energy Policy and News

Article reprinted with permission of DEI. Read full article *here*.

Industry News!

Advanced nuclear initiative unveiled by NASEO to move new projects forward

By Kim Riley

Published on February 07, 2025 by The National Association of State Energy Officials (NASEO) Feb. 5 launched the Advanced Nuclear First Mover Initiative to reduce the cost of advanced nuclear projects and ultimately deliver more power to the electric grid.

Directed by state energy offices, the initiative is led by the state co-chairs New York, Indiana, Kentucky, Tennessee, and Wyoming, and the participating states Maryland, Pennsylvania, Utah, Virginia, and West Virginia.

These states have committed to accelerating advanced nuclear projects by exploring opportunities to reduce financial and technology risks, devising supportive market adoption policies, defining supply chain needs, streamlining federal permitting, developing coordinated procurement options, exploring state-federal-private financing structures, and creating public-private partnerships, NASEO said Wednesday.

"New York is proud to co-lead the Advanced Nuclear First Mover Initiative, which demonstrates our commitment to the exploration of innovative technologies to achieve a reliable and affordable electric system for New York families," New York State Gov. Kathy Hochul said. "New York looks forward to partnering with other states that want to find ways to meet growing energy demand, pursue economic development opportunities, and who share the same vision for a sustainable energy future."

Indiana Gov. Mike Braun said that his state is committed to identifying the strongest pathways for advancing new nuclear projects.

"By co-leading the Advanced Nuclear First Mover Initiative, Indiana will be able to facilitate innovative new partnerships across states and industry, identify supportive policy mechanisms, and develop new tools for decreasing project risk," said Braun.

State and private-sector participants will join forces under the initiative, informed by the nation's leading nuclear experts and NASEO, which will collaborate with key partners and technical experts. This strategic collaboration, information sharing, and formalized partnership will be critical to advancing new projects across a diverse group of states, NASEO said.

Doreen Harris, president and CEO of the New York State Energy Research and Development Authority (NYSERDA) said the agency is pleased to participate in a forum to explore key aspects critical to facilitating advanced nuclear technologies with supportive policies, permitting, procurements and partnerships.

"This effort will allow for broader national coordination, exploration and advancement of advanced nuclear energy, and complements New York's Master Plan process that is now under way," said Harris.

The 10 state energy offices that are a part of the initiative are critical to moving new nuclear projects forward in the United States, according to NASEO President David Terry.

"The State Energy Office-led initiative brings together interested states, industry, utilities, end-users, and investors to develop innovative public-private partnership models, procurement strategies, and supportive policies," Terry said.

DEI DailyEnergyInsider
Your Resource for Energy Policy and News

Article reprinted with permission of DEI. Read full article *here*.

Industry News!

Trump's Energy Secretary Is Betting Big on Nuclear Power

By Felicity Bradstock

- The Trump administration has declared a national energy emergency to support fossil fuels, but it is also backing nuclear power, unlike other clean energy sources.
- Energy Secretary Chris Wright is prioritizing nuclear energy, including advanced nuclear power and small modular reactors, aiming to launch an American nuclear renaissance.
- Trump's policies are expected to boost domestic uranium production and reclassify uranium as a critical mineral, reducing reliance on foreign sources.

President Trump has doubled down on his pledges to allow for more fossil fuel production and reign in green funding since he came into office last month. He signed executive orders to allow for new oil and gas exploration and boost output, as well as restrict new renewable energy projects and halt a great deal of green funding. He declared a national energy emergency on 20th January, under the National Emergencies Act, largely in a bid to support fossil fuels and condemn renewable energy sources. However, perhaps surprisingly, his condemnation of clean energy does not appear to extend to nuclear power, which is expected to flourish under the Trump administration.

Chris Wright, the Energy Secretary appointed by Trump, sees commercial nuclear energy as a key power source in the future of U.S. energy. Upon taking office, he listed his priorities, which included advanced nuclear power, fossil fuels, geothermal, and hydropower. Wright's first Secretarial Order states, "The long-awaited American nuclear renaissance must launch during President Trump's administration. As global energy demand continues to grow, America must lead the commercialisation of affordable and abundant nuclear energy. As such, the Department will work diligently and creatively to enable the rapid deployment and export of next-generation nuclear technology." It also says, "The Department must also prioritize true technological breakthroughs – such as nuclear fusion."

Maria Korsnick, President and CEO of the Nuclear Energy Institute, responded by saying, "We applaud the Senate's confirmation of Chris Wright as Secretary of Energy. In this new role, Secretary Wright will play a pivotal role in furthering our nation's energy and national security goals through prioritizing reliable, 24/7/365 energy generation, like clean nuclear energy. We look

Continued on page 26.

Industry News!

Continued from page 25.

forward to working with Secretary Wright to continue our progress toward building the resilient, reliable, and affordable energy grid of the future."

Some expect Trump to back smaller-scale nuclear projects that are faster and cheaper to get up and running. During his presidential campaign in October, Trump pointed out in an interview with podcaster Joe Rogan that large-scale nuclear builds like Vogtle "get too big, and too complex and too expensive."

During his first term in office, Trump signed an executive order promoting the use of small modular reactors (SMRs) for national defence and space exploration. SMRs are viewed by many as the future of nuclear power as they can be developed cheaper and faster than conventional reactors and can be joined together to produce more power. Further, several non-traditional nuclear energy companies, including start-ups, without the capabilities to build large reactors are developing SMRs. The licensing process for SMRs is expected to be more streamlined than large-scale projects, allowing for faster deployment of nuclear energy across the U.S. This would help achieve Trump's aim of providing more energy to data centres to support the rollout of complex technologies, such as artificial intelligence.

Trump has also emphasised his support for national energy production and goods manufacturing. He recently requested that uranium be reclassified as a critical mineral, after the U.S. Geological Survey (USGS) dropped the nuclear metal from its critical minerals list in 2022 when it deemed uranium a "fuel mineral", meaning it no longer qualified. In his "Unleashing American Energy", Trump asks for uranium to be put back on the list, a move that would help unlock federal funding and fast-track permitting for domestic uranium projects.

The U.S. began producing its first high-assay low-enriched uranium (HALEU) in 2023. The Biden administration supported the development of uranium projects following the Russian invasion of Ukraine and subsequent sanctions on Russian energy. Previously, the U.S. depended heavily on Russia for its HALEU, as the only commercial producer of the fuel. Centrus Energy Corp produced the first 20 kg of domestic HALEU as part of the U.S. Department of Energy's (DoE) HALEU Demonstration project at an enrichment facility in Piketon, Ohio. Speaking about this achievement, Centrus President and CEO Daniel Poneman stated, "This critical milestone is essential to meeting the Department's near-term HALEU needs while laying the groundwork for the full restoration of America's lost domestic uranium enrichment capacity."

The U.S. continues to import most of its uranium from Canada, Australia, Russia, Kazakhstan, and Uzbekistan because it is cheaper and more abundant. U.S. companies pay a combined $1 billion a year to Russia's state-owned nuclear agency, Rosatom, importing around 14 percent of U.S. uranium and 28 percent of U.S. enrichment services. However, with sanctions on Russian energy and the potential introduction of tariffs on Canadian products, Trump is expected to support the expansion of a domestic uranium industry.

Experience from President Trump's first term in office, as well as decisions made in the first month of his second term, suggest that, unlike other clean energy sources, nuclear power might thrive under the Trump administration. In addition to fossil fuels, Trump has voiced his support for nuclear power and has appointed an Energy Secretary who favours the power source, suggesting that the sector may grow significantly as several states continue to back clean energy projects.

OILPRICE.com
The No. 1 Source for Oil & Energy News

Article reprinted with permission of NEI. Read full article *here*.

Inside NIRMA Magazine is published three times annually.

Click *here* to view past issues.

NIRMA