DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.01.01**	(01.01.01) (1)	automated/manual	initially & following implementation of customer changes

5. Attribute

Product-Oriented Work Breakdown Structure (WBS)

6. Metric Intent

This metric confirms that the WBS is product and deliverable oriented depicting the breakdown of contract work scope/federal directed scope documents for work authorization, tracking, and reporting purposes. This metric compares the products and deliverables in the scope documents to the WBS. All elements of the WBS are defined in an accompanying WBS dictionary, as required. Reference is made to the DOE WBS handbook for this assessment.

7. Metric Short Description

WBS dictionary unsubstantiated

8. Metric

X =
1. Products and deliverables listed in the contract work scope/federal directed scope documents are not identified in the WBS dictionary.
2. Product-oriented groupings of project scope elements in the WBS dictionary are not organized and subdivided to the total work scope as defined in the contract work scope/federal directed scope documents.
3. The WBS dictionary does not define the products and deliverables to be developed or produced.
4. The WBS dictionary does not relate elements of work to be accomplished to each other and the overall end product.

Y = Number of WBS identifiers in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	contract work scope/federal directed scope documents	FF01_{WBS}_[C]_WBS FF01_{WBS}_[D]_title FF01_{WBS}_[E]_level FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[J]_WBS_narrative

13. Assumptions

FF01_{WBS} identifies all WBS identifiers in the WBS dictionary.
Reference DOE WBS handbook for guidance.

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[D]_title <listing>
- FF01_{WBS}_[J]_WBS_narrative <listing>
- FF01_{WBS}_[E]_level <listing>
- FF01_{WBS}_[G]_WBS_type <listing>

Y
qualifier
other 1
other 2
other 3
other 4

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- 1. Products and deliverables listed in the contract work scope/federal directed scope documents are not identified in the WBS dictionary.
  2. Product-oriented groupings of project scope elements in the WBS dictionary are not organized and subdivided to the total work scope as defined in the contract work scope/federal directed scope documents.
  3. The WBS dictionary does not define the products and deliverables to be developed or produced.
  4. The WBS dictionary does not relate elements of work to be accomplished to each other and the overall end product.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 4, Management Value: "The WBS is a product-oriented division of project tasks depicting the breakdown of work scope for work authorization, tracking, and reporting purposes that facilitates traceability and provides a control framework for integrated program management."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.01.02**	(01.01.02) (2)	automated/manual verification	initially & following implementation of customer changes

5. Attribute

Product-Oriented Work Breakdown Structure (WBS)

6. Metric Intent

This metric confirms that the WBS dictionary extends to the CA level (at a minimum) and that the WBS dictionary and WAD scope statement/content are consistent depicting the breakdown of work for authorization, tracking, and reporting purposes that facilitates traceability and provides a control framework for integrated project management. This metric ensures that the WBS dictionary provides a complete accounting of work scope requirements for the authorization to proceed.

7. Metric Short Description

WBS scope, dictionary <> WAD

a

8. Metric

X = Number of CAs and SLPPs in the WBS dictionary, where WBS dictionary scope does not match WAD scope.

Y = Number of CAs and SLPPs in the WBS dictionary.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF01_{WBS} FF13_{WAD}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[J]_WBS_narrative FF13_{WAD}_[C]_WBS FF13_{WAD}_[L]_scope

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA or SLPP

Y

qualifier

WBS type

Determine X items, a subset of Y, based on the following.

Identify FF01_{WBS}_[C]_WBS,FF13_{WAD}_[C]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF01_{WBS}_[J]_WBS_narrative <> FF13_{WAD}_[L]_scope
  OR
  FF01_{WBS}_[J]_WBS_narrative = null

X

qualifier

qualifier

operation

Conduct the following manual operation(s).

- Verify manually.

manual

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 4, Management Value: "The WBS is a product-oriented division of project tasks depicting the breakdown of work scope for work authorization, tracking, and reporting purposes that facilitates traceability and provides a control framework for integrated program management."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Section 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.01.04**	(01.02.01) (3)	automated/manual verification	initially & following implementation of customer changes

5. Attribute

Product-Oriented Work Breakdown Structure (WBS)

6. Metric Intent

This metric confirms that the WBS includes all authorized project work scope and any revisions resulting from authorized changes and modifications. This metric uses the CA WBS BAC value to identify the initial work scope, and when work scope is added or changed. The count of differences between CA WBS BAC values listed in the RAM and CA WBS BAC values listed in the IPMR F1 will identify when the CA WBS may not reflect all work scope.

7. Metric Short Description

CA DB, RAM <> IPMR F1

a

8. Metric

X = Number of CAs in the RAM, where RAM CA DB <> IPMR F1 CA BAC DB.

Y = Number of CAs in the dollarized RAM.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF08_{IPMR_F1} FF03_{cost} RAM IPMR F1	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF03_{cost}_[K]_DB FF08_{IPMR_F1}_[C]_WBS FF08_{IPMR_F1}_[J]_BAC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

qualifier

- FF01_{WBS}_[G]_WBS_type = CA

WBS type

Determine X items, a subset of Y, based on the following.

X

Identify FF08_{IPMR_F1}_[C]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF03_{cost}_[K]_DB <> FF08_{IPMR_F1}_[J]_BAC

operation

Conduct the following manual operation(s).

manual

- Verify manually against the RAM and IPMR F1.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 4, Typical Attribute(s): "Only one WBS is used per project and it contains all project work, including revisions for authorized changes and modifications."

Page 4, Typical Attribute(s): "The WBS elements should collectively provide a complete definition of work scope requirements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.01.05**	(01.02.03) (4)	automated	monthly

5. Attribute

Product-Oriented Work Breakdown Structure (WBS)

6. Metric Intent

This metric confirms that the WBS includes all authorized project work and any revisions resulting from authorized changes and modifications. This metric ensures that the WBS identifiers collectively provide a complete definition of work scope requirements.

7. Metric Short Description

WBS, index <> BL IMS

a A

8. Metric

X = Number of WBS identifiers in the WBS index, where identifiers <> BL IMS WBS identifiers.

Y = Number of WBS identifiers in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF04_{schedule} WBS dictionary	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[G]_WBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = WP or PP or SLPP

Y
qualifier
WBS type

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF04_{schedule}_[G]_WBS = null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 4, Typical Attribute(s): "Only one WBS is used per project and it contains all project work, including revisions for authorized changes and modifications."

Page 4, Typical Attribute(s): "The WBS elements should collectively provide a complete definition of work scope requirements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 10 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.02.01**	(01.03.01) (5)	automated/manual verification	monthly

5. Attribute

Work Breakdown Structure (WBS) Hierarchy

6. Metric Intent

This metric confirms that the prime contractor has instituted a product-oriented breakdown of the project into smaller components that provide the hierarchical relationships of scope and resources assigned to various organizational levels consistent with external (customer) management analysis and reporting requirements. This metric compares the difference between the current and prior month dollarized CA or SLPP WBS and BACs.

7. Metric Short Description

CA and SLPP WBS or DB, current <> prior

8. Metric

X = Number of CA and SLPP WBSs in the prior month report, where CA and SLPP WBS or DB in the prior month report <> CA WBS or DB in the current month report.

Y = Number of CA and SLPP WBSs in the prior month report.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
CPP-1_FF01_{WBS}	FF03_{cost} CPP-1_FF03_{cost}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF03_{cost}_[K]_DB CPP-1_FF01_{WBS}_[C]_WBS CPP-1_FF01_{WBS}_[G]_WBS_type CPP-1_FF03_{cost}_[K]_DB

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count CPP-1_FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA or SLPP

Determine X items, a subset of Y, based on the following.

Identify CPP-1_FF03_{cost}_[D]_WBS,FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- CPP-1_FF03_{cost}_[D]_WBS <> FF03_{cost}_[D]_WBS
  OR
  CPP-1_FF03_{cost}_[K]_DB <> FF03_{cost}_[K]_DB

Conduct the following manual operation(s).

- Change control documentation or the CAM cannot demonstrate difference with CA WBS or DB.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type

X
qualifier
qualifier
operation

manual
operation

15. Reference(s)

Page 4, Typical Attribute(s): "The WBS identifies all WBS elements specified for external reporting."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.02.02**	(01.04.01) (6)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Work Breakdown Structure (WBS) Hierarchy

6. Metric Intent

This metric confirms that the WBS is arranged in a hierarchy and constructed to allow for clear and logical groupings, including identification of subcontractor work scope. This metric determines if products and/or deliverables, including subcontractor work scope, have been appropriately decomposed into logical parent and child relationships using the technical explanations provided by CAM during discussions.

7. Metric Short Description

WBS not further decomposed

8. Metric

X = Number of WBS indentifiers in the WBS index based on the contract work scope/federal directed scope documents, where WBS products and deliverables have not been further decomposed into logical parent and child relationships based on discussions with the CAMs.

Y = Number of WBS indentifiers in the WBS index based on the contract work scope/federal directed scope documents.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	contract work scope/federal directed scope documents	FF01_{WBS}_[C]_WBS FF01_{WBS}_[D]_title FF01_{WBS}_[E]_level FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[J]_WBS_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[D]_title <listing>
- FF01_{WBS}_[J]_WBS_narrative <listing>
- FF01_{WBS}_[E]_level <listing>
- FF01_{WBS}_[G]_WBS_type <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- WBS products/deliverables that have not been further decomposed into logical parent and child relationships based on discussions with the CAMs.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1
other 2
other 3
other 4

X
qualifier
operation

15. Reference(s)

Page 4, Intent: "A WBS is a direct representation of the work scope in the project, documenting the hierarchy and description of the tasks to be performed and their relationship to the product deliverables...The WBS elements should collectively provide a complete definition of work scope requirements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.03.01**	(02.01.01) (7)	manual	monthly

5. Attribute

Organizational Breakdown Structure (OBS)

6. Metric Intent

This metric confirms that all authorized work is assigned to organizational elements. This metric based on the integration of the dollarized RAM and IPMR F2 CA BAC dollar values, and ensures that organization elements are identified and used by the company for execution of the project.

7. Metric Short Description

DB, IPMR F2 <> dollarized RAM

a

8. Metric

X = Number of CA WBSs in the RAM, where RAM CA CAM <> WBS index CAM or RAM CA DB <> IPMR F1 DB or RAM OBS DB <> IPMR F2 DB.

Y = Number of CA WBSs in the RAM.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.4

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS} FF08_{IPMR_F1} FF09_{IPMR_F2}	RAM	FF01_{WBS}_[I]_CAM FF08_{IPMR_F1}_[J]_BAC FF09_{IPMR_F2}_[J]_BAC

13. Assumptions

14. Instructions

Y

Determine Y items based on the following.

qualifier

Count RAM CA,RAM CA CAM,RAM CA DB,RAM OBS DB items and, if identified, with the following characteristics.

X

Determine X items, a subset of Y, based on the following.

qualifier

Identify FF01_{WBS}_[I]_CAM,FF08_{IPMR_F1}_[J]_BAC,FF09_{IPMR_F2}_[J]_BAC and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

operation

- RAM CA CAM <> FF01_{WBS}_[I]_CAM
  OR
  RAM CA DB <> FF08_{IPMR_F1}_[J]_BAC
  OR
  RAM OBS DB <>FF09_{IPMR_F2}_[J]_BAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 6, Typical Attribute(s): "All authorized work is assigned to organizational elements." "Organization elements are work teams, functions, or whatever organization units are used by the company for execution of the program work efforts."

Page 6, Intent: "The assignment of lower-level work segments to responsible managers should provide key control points for management purposes."

EIA-748D, page 5, section 2.1 (b): "Identify the program organizational structure, including the major subcontractors, responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.01**	(03.01.01) (8)	automated/manual verification	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each as other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the WP level through the total project level. This metric with the integration of the schedule and cost system ensures that the determination of performance measurement for in-progress work is consistent and reliable.

7. Metric Short Description

labor % complete, FC IMS <> EVMS cost tool

a A

8. Metric

X = Number of incomplete WP WBSs in the FC IMS, where FC IMS labor % complete <> EVMS cost tool labor % complete.

Y = Number of incomplete WP WBSs in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%	0.001	2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost}	FF04_{schedule} FF03_{cost} data presented by CAM	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[O]_DB FF03_{cost}_[P]_BCWPc FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AE]_cum_BCWP FF04_{schedule}_[AF]_BAC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = WP

WBS type

- FF04_{schedule}_[C]_schedule_type = FC

sch. type

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[G]_WBS,FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[AE]_cum_BCWP / FF04_{schedule}_[AF]_BAC <> FF03_{cost}_[P]_BCWPc / FF03_{cost}_[O]_DB

operation

Conduct the following manual operation(s).

manual

- 1. IMS % complete for non-labor EOCs <> EVMS cost tool % complete for non-labor by WBS.
  2. The CAM cannot demonstrate FC IMS % complete by WBS.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 6, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data element"

Page 6, Intent: "The work tasks are assigned to a WBS and OBS and are traceable to the planning and budgeting system and the cost collection system. Establishment of a unique coding structure facilitates the linkage between the planning, scheduling, budgeting, work authorization, cost accumulation, and performance measurement processes."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.02**	(03.01.02) (9)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the WP and PP levels through the total project level. This metric with the integration of the schedule system and cost system ensures that project schedule start and finish date information align to corresponding cost system time-phased information for all incomplete work.

7. Metric Short Description

start or finish dates, BL IMS <> EVMS cost tool

a A

8. Metric

X = Number of incomplete WP or PP WBSs in the BL IMS, where BL IMS start or finish dates <> EVMS cost tool start or finish dates.

Y = Number of incomplete WP or PP WBSs in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF03_{cost}_[C]_period_date
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS
		FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[K]_inc_BCWS_dollars
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[L]_ES_date [period]
		FF04_{schedule}_[M]_EF_date [period]
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = WP or PP

WBS type

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[E]_task_type <> M or SVT or ZBA or SM

task type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[G]_WBS,FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[L]_ES_date [period] <> FF03_{cost}_[C]_period_date where first FF03_{cost}_[K]_inc_BCWS_dollars <> 0/null
  OR
  FF04_{schedule}_[M]_EF_date [period] <> FF03_{cost}_[C]_period_date where last FF03_{cost}_[K]_inc_BCWS_dollars <> 0/null

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. New metric, BL.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.03**	(03.01.03) (10)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the schedule system and cost system ensures that project schedule start, actual start, and schedule finish date information align to corresponding cost system time-phased ETC and ACWP information for all incomplete work by EOC.

7. Metric Short Description

start or finish dates by EOC, FC IMS <> EVMS cost tool

a A

8. Metric

X = Number of incomplete WP or PP WBSs by EOC in the FC IMS, where FC IMS start, actual start, or finish dates <> EVMS cost tool start, actual start, or finish dates.

Y = Number of incomplete WP or PP WBSs by EOC in the FC IMS.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF03_{cost}_[C]_period_date
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS
		FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[K]_inc_BCWS_dollars
		FF03_{cost}_[L]_inc_BCWP_dollars
		FF03_{cost}_[M]_inc_ACWP_dollars
		FF03_{cost}_[N]_inc_ETC_dollars
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[L]_ES_date [period]
		FF04_{schedule}_[M]_EF_date [period]
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF06_{schedule_resources}_[C]_schedule_type
		FF06_{schedule_resources}_[E]_task_ID
		FF06_{schedule_resources}_[H]_EOC

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[G]_WBS by FF06_{schedule_resources}_[H]_EOC items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = WP or PP or CA (if ACWP at CA)

WBS type

- FF04_{schedule}_[C]_schedule_type = FC,FF06_{schedule_resources}_[C]_schedule_type=FC

sch. type

- FF04_{schedule}_[E]_task_type <> M or SVT or ZBA or SM

task type

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC,FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- first of (FF04_{schedule}_[T]_AS_date (IF FF04_{schedule}_[T]_AS_date = null) OR FF04_{schedule}_[L]_ES_date [period] (IF FF04_{schedule}_[T]_AS_date <> null)) <> first of (ETC (IF FF03_{cost}_[M]_inc_ACWP_dollars = null OR FF03_{cost}_[L]_inc_BCWP_dollars = null) OR first of FF03_{cost}_[M]_inc_ACWP_dollars or FF03_{cost}_[L]_inc_BCWP_dollars (IF FF03_{cost}_[M]_inc_ACWP_dollars <> null OR FF03_{cost}_[L]_inc_BCWP_dollars <> null))
  OR

operation

last of (FF04_{schedule}_[U]_AF_date (IF FF04_{schedule}_[U]_AF_date <> null) OR FF04_{schedule}_[M]_EF_date [period] (IF FF04_{schedule}_[U]_AF_date = null)) <> last FF03_{cost}_[N]_inc_ETC_dollar

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

Page 44, Typical Attribute(s): "Control account manager should generate the Estimate to Complete (ETC) at the work package and planning package level. The sum of the control account manager's work package and planning package ETCs are added to the control account actual cost to develop the control account EAC. Control account EACs are summarized through the WBS and OBS to the program and contract level."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Combined IDs 03.01.02 and 03.01.03 metrics, FC.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.04**	(03.01.04) (11)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the cost system and work authorization ensures that cost system BL start and finish date information align to corresponding work authorization start and finish date information for all incomplete CAs.

7. Metric Short Description

start or finish dates, EVMS cost tool <> WAD [a]

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where EVMS cost tool start or finish dates <> WAD start or finish dates.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF13_{WAD} FF03_{cost}	FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF13_{WAD}_[C]_WBS FF13_{WAD}_[J]_POP_start_date [period] FF13_{WAD}_[K]_POP_finish_date [period]

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA [qualifier: WBS type]
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB [qualifier: **incomplete**]

Determine X items, a subset of Y, based on the following. [X]

Identify FF13_{WAD}_[C]_WBS and, if identified, with the following characteristics. [qualifier]

Count flagged items based on the following operation(s). [qualifier]

- FF03_{cost}_[C]_period_date where FF03_{cost}_[K]_inc_BCWS_dollars is earliest <> FF13_{WAD}_[J]_POP_start_date [period]
  OR
  FF03_{cost}_[C]_period_date where FF03_{cost}_[K]_inc_BCWS_dollars is latest <> FF13_{WAD}_[K]_POP_finish_date [period] [operation]

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.05**	(03.01.05) (12)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the cost system and work authorization ensures that cost system BAC dollar value information align to corresponding work authorization BAC dollar value information for all incomplete CAs.

7. Metric Short Description

DB, EVMS cost tool <> WAD

a

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where EVMS cost tool DB <> WAD budget.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%	1000	2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF13_{WAD} FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF13_{WAD}_[C]_WBS FF13_{WAD}_[H]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y

qualifier

WBS type

incomplete

Determine X items, a subset of Y, based on the following.

Identify FF13_{WAD}_[C]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF03_{cost}_[K]_DB <> FF13_{WAD}_[H]_budget_dollars

X

qualifier

qualifier

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.08**	(03.01.08) (13)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric compares the count of differences between dollarized RAM budget values to the IPMR F1 budget values for the same WBS elements.

7. Metric Short Description

DB, cost tool <> IPMR F1

a

8. Metric

X = Number of CA WBSs in the WBS index, where cost tool DB <> IPMR F1 DB.

Y = Number of CA WBSs in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF03_{cost} FF08_{IPMR_F1}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF03_{cost}_[D]_WBS FF03_{cost}_[K]_DB FF08_{IPMR_F1}_[C]_WBS FF08_{IPMR_F1}_[J]_BAC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA

Y
qualifier
WBS type

Determine X items, a subset of Y, based on the following.

Identify FF08_{IPMR_F1}_[C]_WBS,(FF03_{cost}_[D]_WBS) and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF03_{cost}_[K]_DB <> FF08_{IPMR_F1}_[J]_BAC

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "The work tasks are assigned to a WBS and OBS and are traceable to the planning and budgeting system and the cost collection system. Establishment of a unique coding structure facilitates the linkage between the planning, scheduling, budgeting, work authorization, cost accumulation, and performance measurement processes."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.04.09**	(03.01.09) (14)	automated	monthly

5. Attribute

Integrated System with Common Structures

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization, and cost accumulation systems integrated with each other as appropriate, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the schedule system and cost system ensures that schedule system WBS coding structure information align to corresponding cost system WBS coding structure information for all incomplete work.

7. Metric Short Description

WBS identifier in BL IMS not in EVMS cost tool

a A

8. Metric

X = Number of WBSs in the BL IMS, where BL IMS WBS identifier not in EVMS cost tool.

Y = Number of WBSs in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF03_{cost}	FF03_{cost}_[D]_WBS FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[G]_WBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- FF04_{schedule}_[E]_task_type <> M or SVT or ZBA or SM — task type

Determine X items, a subset of Y, based on the following.

X

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF03_{cost}_[D]_WBS = null — operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "The work tasks are assigned to a WBS and OBS and are traceable to the planning and budgeting system and the cost collection system. Establishment of a unique coding structure facilitates the linkage between the planning, scheduling, budgeting, work authorization, cost accumulation, and performance measurement processes."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.01**	(01.02.02) (15)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that the WBS includes all authorized project work scope and any revisions resulting from authorized changes and modifications. This metric looks for material differences between the published WBS identifiers and descriptions and the technical explanations provided by CAM during discussions.

7. Metric Short Description

WBS descriptions, dictionary <> CAM

8. Metric

X = Number of WBS identifiers in the WBS dictionary, where descriptions <> descriptions provided by CAM during discussions.

Y = Number of WBS identifiers in the WBS dictionary.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	WBS dictionary data presented by CAM	FF01_{WBS}_[C]_WBS FF01_{WBS}_[D]_title FF01_{WBS}_[E]_level FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[J]_WBS_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[D]_title <listing>
- FF01_{WBS}_[J]_WBS_narrative <listing>
- FF01_{WBS}_[E]_level <listing>
- FF01_{WBS}_[G]_WBS_type <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- WBS identifiers and descriptions provided by CAM <> WBS dictionary.

Conduct the following manual operation(s).

- Verify manually against the WBS dictionary.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1
other 2
other 3
other 4

X
qualifier
operation
manual
operation

15. Reference(s)

Page 4, Typical Attribute(s): "Only one WBS is used per project and it contains all project work, including revisions for authorized changes and modifications."

Page 4, Typical Attribute(s): "The WBS elements should collectively provide a complete definition of work scope requirements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.02**	(05.01.01) (16)	automated	monthly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that each CA is assigned to a single organizational element directly responsible for the work scope. This metric ensures that each CA does not have more than 1 responsible OBS or no assigned responsible OBS.

7. Metric Short Description

CA does not have just 1 responsible organization

a A

8. Metric

X = Number of CA WBSs in the WBS index, where WBS does not have just 1 responsible organization.

Y = Number of CA WBSs in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF01_{WBS}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[H]_OBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA

Y
qualifier
WBS type

Determine X items, a subset of Y, based on the following.

Identify FF01_{WBS}_[C]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF01_{WBS}_[H]_OBS count <> 1

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Intent: "The control account is the point where the WBS tasks and OBS responsibility intersect. It is defined as the point where a single functional organization or integrated product team has responsibility for work defined to a single WBS element. There may be multiple control accounts within a responsible OBS element when the effort within a WBS element must be segregated for management control purposes driven by scope and exit criteria (i.e., completion of task scope)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.03**	(05.01.02) (17)	automated	monthly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that each CA is assigned to a single WBS element directly responsible for the work scope. This metric ensures that each CA does not have more than 1 WBS or no assigned WBS.

7. Metric Short Description

CA is not assigned just 1 WBS in EVMS cost tool

a

8. Metric

X = Number of CA WBSs in the WBS index, where CA does not have just 1 assignment in the EVMS cost tool.

Y = Number of CA WBSs in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF03_{cost}	FF01_{WBS}_[G]_WBS_type FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

qualifier

WBS type

Count FF01_{WBS}_[G]_WBS_type items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA

Determine X items, a subset of Y, based on the following.

X

qualifier

other 1

qualifier

operation

Identify FF03_{cost}_[G]_WBS_type and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA

Count flagged items based on the following operation(s).

- FF03_{cost}_[D]_WBS = 0/null
  OR
  FF03_{cost}_[D]_WBS count > 1

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Intent: "The control account is the point where the WBS tasks and OBS responsibility intersect. It is defined as the point where a single functional organization or integrated product team has responsibility for work defined to a single WBS element. There may be multiple control accounts within a responsible OBS element when the effort within a WBS element must be segregated for management control purposes driven by scope and exit criteria (i.e., completion of task scope)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.04**	(05.02.01) (18)	automated/manual	quarterly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that the CAM has responsibility, authority, and accountability for the work scope and performance of the CA. This metric verifies that the CAM is the same person obtaining authorization in the WAD by checking BCR signatures for each CA.

7. Metric Short Description

CAM, BCR <> WAD

8. Metric

X = Number of BCRs in the change control log, where CAM who signed the BCR <> WAD CAM in the WAD.

Y = Number of BCRs in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF11_{CC_log} FF12_{CC_log_detail} FF01_{WBS} FF13_{WAD}	FF01_{WBS} BCR	FF01_{WBS}_[C]_WBS FF01_{WBS}_[I]_CAM FF11_{CC_log}_[C]_BCR_ID FF11_{CC_log}_[D]_approved_date FF12_{CC_log_detail}_[D]_BCR_ID FF12_{CC_log_detail}_[E]_WBS FF13_{WAD}_[C]_WBS FF13_{WAD}_[E]_CAM CPP-1_FF11_{CC_log}_[B]_CPP_status_date

13. Assumptions

Test is for BCPs for the period.

14. Instructions

Determine Y items based on the following.

Y

Count
FF11_{CC_log}_[C]_BCR_ID,FF12_{CC_log_detail}_[D]_BCR_ID,(FF12_{CC_log_detail}_[E]_WBS,FF01_{WBS}_[C]_WBS, FF13_{WAD}_[C]_WBS) items and, if identified, with the following characteristics.

qualifier

- FF11_{CC_log}_[D]_approved_date > CPP-1_FF11_{CC_log}_[B]_CPP_status_date — other 1
- FF12_{CC_log_detail}_[E]_WBS <listing> — other 2
- FF01_{WBS}_[I]_CAM <listing> — other 3
- FF13_{WAD}_[E]_CAM <listing> — other 4

Determine X items, a subset of Y, based on the following.

X

Manually count flagged items based on the following operation(s).

qualifier

- FF01_{WBS}_[I]_CAM <> BCR_CAM_signature
  OR
  FF13_{WBS}_[E]_CAM <> BCR_CAM_signature

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Intent: "The control account is also the primary point for work authorization, work performance management, and work performance measurement; i.e., where planned value is established, earned value is assessed, and actual costs are collected. Each control account is assigned to a control account manager. The control account manager has the responsibility, authority, and accountability to ensure the accomplishment of work in their control account and is the focal point for management control."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.05**	(05.03.01) (19)	automated	monthly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that there is only one CAM assigned to each CA. This metric examines the dollarized RAM to identify CAs listing more than 1 CAM.

7. Metric Short Description

CA does not have just 1 CAM assigned

a A

8. Metric

X = Number of CA WBSs in the WBS index, where CA does not have just 1 CAM in the EVMS cost tool.

Y = Number of CA WBSs in the WBS index.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF01_{WBS}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[I]_CAM

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA

Y
qualifier
WBS type

Determine X items, a subset of Y, based on the following.

Identify FF01_{WBS}_[C]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF01_{WBS}_[I]_CAM count <> 1

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Intent: "Each control account is assigned to a control account manager."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.06**	(05.04.01) (20)	automated	quarterly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that CAs are established based on the complexity of the work, and the control and analysis needed to manage the work effectively. This metric ensures that the identification of the CA structure and the proper level of management is based on the complexity of the work and the capability of the organization.

7. Metric Short Description

CAM or DB, WAD <> dollarized RAM

a

8. Metric

X = Number of incomplete WADs, where WAD CAM or budget <> dollarized RAM CAM or DB.

Y = Number of incomplete WADs.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF13_{WAD}	FF01_{WBS}	FF01_{WBS}_[C]_WBS
FF03_{cost}	FF03_{cost}	FF01_{WBS}_[I]_CAM
	FF13_{WAD}	FF03_{cost}_[D]_WBS
		FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[K]_DB
		FF03_{cost}_[L]_BCWPc
		FF13_{WAD}_[C]_WBS
		FF13_{WAD}_[E]_CAM
		FF13_{WAD}_[H]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF13_{WAD}_[C]_WBS,FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF01_{WBS}_[C]_WBS,FF13_{WAD}_[C]_WBS,FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF13_{WAD}_[E]_CAM <> FF01_{WBS}_[I]_CAM
  OR
  F13_{WAD}_[H]_budget_dollars <> FF03_{cost}_[K]_DB

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Management Value: "The careful establishment of the control account structure ensures the proper level of management is established based on the complexity of the work and the capability of the organization."

Page 9, Intent: "The establishment of multiple control accounts should be determined by the control account's scope of the management tasks and consideration for planning and control of budgets, schedules, work assignments, progress assessment, problem identification, and corrective actions."

Page 9, Intent: "Each control account is assigned to a control account manager. The control account manager has the responsibility, authority, and accountability to ensure the accomplishment of work in their control account and is the focal point for management control."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
A	**A.05.07**	(05.04.02) (21)	automated	quarterly

5. Attribute

Control Account (CA) to Organizational Element

6. Metric Intent

This metric confirms that CAs are established based on the complexity of the work, and the control and analysis needed to manage the work effectively. This metric ensures that the identification of the CA structure and the proper level of management is based on the complexity of the work and the capability of the organization. The metric ensures there are no open CAs with budget values > 7% of the PMB work remaining and period BCWS with 3 consecutive period SV or CV with > 10% threshold breach.

7. Metric Short Description

CA with 3 consecutive SV or CV threshold trips

8. Metric

X = Number of CA WBSs where CAM work remaining/project work remaining > 7% and CAM BCWSi/project BCWSi > 10% in the EVMS cost tool, with 3 consecutive period SV or CV threshold trips.

Y = Number of CA WBSs where CAM work remaining/project work remaining > 7% and CAM BCWSi/project BCWSi >10% in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF07_{IPMR header}	FF03_{cost}_[B]_CPP_status_date
	CPP-1_FF03_{cost}	FF03_{cost}_[C]_period_date
	CPP-2_FF03_{cost}	FF03_{cost}_[D]_WBS
	CPP-1_FF07_{IPMR header}	FF03_{cost}_[G]_WBS_type
	CPP-2_FF07_{IPMR header}	FF03_{cost}_[K]_inc_BCWS_dollars
		FF03_{cost}_[K]_BCWSc
		FF03_{cost}_[K]_DB
		FF03_{cost}_[L]_inc_BCWP_dollars
		FF03_{cost}_[L]_BCWPc
		FF03_{cost}_[M]_inc_ACWP_dollars
		FF03_{cost}_[M]_ACWPc
		FF07_{IPMR_header}_[B]_CPP_status_date
		FF07_{IPMR_header}_[Y]_F1_6_c_CBB
		FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt
		FF07_{IPMR_header}_[AK]_threshold_cum_dollar
		FF07_{IPMR_header}_[AL]_threshold_cum_pct
		FF07_{IPMR_header}_[AM]_threshold_inc_dollar
		FF07_{IPMR_header}_[AN]_threshold_inc_pct
		CPP-1_FF03_{cost}_[B]_CPP_status_date
		CPP-2_FF03_{cost}_[B]_CPP_status_date
		CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars
		CPP-2_FF03_{cost}_[K]_inc_BCWS_dollars
		CPP-1_FF03_{cost}_[K]_BCWSc
		CPP-2_FF03_{cost}_[K]_BCWSc
		CPP-1_FF03_{cost}_[L]_inc_BCWP_dollars
		CPP-2_FF03_{cost}_[L]_inc_BCWP_dollars
		CPP-1_FF03_{cost}_[L]_BCWPc
		CPP-2_FF03_{cost}_[L]_BCWPc
		CPP-1_FF03_{cost}_[M]_inc_ACWP_dollars
		CPP-2_FF03_{cost}_[M]_inc_ACWP_dollars
		CPP-1_FF03_{cost}_[M]_ACWPc
		CPP-2_FF03_{cost}_[M]_ACWPc
		CPP-1_FF07_{IPMR_header}_[B]_CPP_status_date
		CPP-2_FF07_{IPMR_header}_[B]_CPP_status_date
		CPP-1_FF07_{IPMR_header}_[AK]_threshold_cum_dollar
		CPP-2_FF07_{IPMR_header}_[AK]_threshold_cum_dollar
		CPP-1_FF07_{IPMR_header}_[AL]_threshold_cum_pct
		CPP-2_FF07_{IPMR_header}_[AL]_threshold_cum_pct
		CPP-1_FF07_{IPMR_header}_[AM]_threshold_inc_dollar
		CPP-2_FF07_{IPMR_header}_[AM]_threshold_inc_dollar
		CPP-1_FF07_{IPMR_header}_[AN]_threshold_inc_pct
		CPP-2_FF07_{IPMR_header}_[AN]_threshold_inc_pct

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = CA

WBS type

- (FF03_{cost}_[K]_DB - FF03_{cost}_[L]_BCWPc) for CAM / (FF03_{cost}_[K]_DB - FF03_{cost}_[L]_BCWPc) for project > 7%

other 1

- FF03_{cost}_[K]_inc_BCWS_dollars for CAM / FF03_{cost}_[K]_inc_BCWS_dollars for project > 10%

other 2

Determine X items, a subset of Y, based on the following.

X

Identify FF03_{cost}_[B]_CPP_status_date,CPP-1_FF03_{cost}_[B]_CPP_status_date,CPP-2_FF03_{cost}_[B]_CPP_status_date,FF07_{IPMR_header}_[B]_CPP_status_date,CPP-1_FF07_{IPMR_header}_[B]_CPP_status_date,CPP-2_FF07_{IPMR_header}_[B]_CPP_status_date and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation

other 1

Count flagged items based on the following operation(s).

qualifier

operation

- (abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[K]_inc_BCWS_dollars) > FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(CPP-1_FF03_{cost}_[L]_inc_BCWP_dollars - CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars) > CPP-1_FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(CPP-2_FF03_{cost}_[L]_inc_BCWP_dollars - CPP-2_FF03_{cost}_[K]_inc_BCWS_dollars) > CPP-2_FF07_{IPMR_header}_[AM]_threshold_inc_dollar)
  OR
  (abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(CPP-1_FF03_{cost}_[L]_BCWPc - CPP-1_FF03_{cost}_[K]_BCWSc) > CPP-1_FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(CPP-2_FF03_{cost}_[L]_BCWPc - CPP-2_FF03_{cost}_[K]_BCWSc) > CPP-2_FF07_{IPMR_header}_[AK]_threshold_cum_dollar)
  OR
  (abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[K]_inc_BCWS_dollars) > FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(CPP-1_FF03_{cost}_[L]_inc_BCWP_dollars / CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars) > CPP-1_FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(CPP-2_FF03_{cost}_[L]_inc_BCWP_dollars / CPP-2_FF03_{cost}_[K]_inc_BCWS_dollars) > CPP-2_FF07_{IPMR_header}_[AN]_threshold_inc_pct)
  OR
  (abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct
  AND
  abs(CPP-1_FF03_{cost}_[L]_BCWPc / CPP-1_FF03_{cost}_[K]_BCWSc) > CPP-1_FF07_{IPMR_header}_[AL]_threshold_cum_pct
  AND
  abs(CPP-2_FF03_{cost}_[L]_BCWPc / CPP-2_FF03_{cost}_[K]_BCWSc) > CPP-2_FF07_{IPMR_header}_[AL]_threshold_cum_pct)
  OR
  (abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[M]_inc_ACWP_dollars) > FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(CPP-1_FF03_{cost}_[L]_inc_BCWP_dollars - CPP-1_FF03_{cost}_[M]_inc_ACWP_dollars) > CPP-1_FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(CPP-2_FF03_{cost}_[L]_inc_BCWP_dollars - CPP-2_FF03_{cost}_[M]_inc_ACWP_dollars) > CPP-2_FF07_{IPMR_header}_[AM]_threshold_inc_dollar)
  OR
  (abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(CPP-1_FF03_{cost}_[L]_BCWPc - CPP-1_FF03_{cost}_[M]_ACWPc) > CPP-1_FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(CPP-2_FF03_{cost}_[L]_BCWPc - CPP-2_FF03_{cost}_[M]_ACWPc) > CPP-2_FF07_{IPMR_header}_[AK]_threshold_cum_dollar)
  OR
  (abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[M]_inc_ACWP_dollars) > FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(CPP-1_FF03_{cost}_[L]_inc_BCWP_dollars / CPP-1_FF03_{cost}_[M]_inc_ACWP_dollars) > CPP-1_FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(CPP-2_FF03_{cost}_[L]_inc_BCWP_dollars / CPP-2_FF03_{cost}_[M]_inc_ACWP_dollars) > CPP-2_FF07_{IPMR_header}_[AN]_threshold_inc_pct)
  OR
  (abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct
  AND
  abs(CPP-1_FF03_{cost}_[L]_BCWPc / CPP-1_FF03_{cost}_[M]_ACWPc) > CPP-1_FF07_{IPMR_header}_[AL]_threshold_cum_pct

AND
abs(CPP-2_FF03_{cost}_[L]_BCWPc / CPP-2_FF03_{cost}_[M]_ACWPc) > CPP-2_FF07_{IPMR_header}_[AL]_threshold_cum_pct)

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 9, Intent: "The establishment of multiple control accounts should be determined by the control account's scope of the management tasks and consideration for planning and control of budgets, schedules, work assignments, progress assessment, problem identification, and corrective actions."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.01.01**	(06.01.01) (22)	automated	monthly

5. Attribute

Authorized, Time-Phased Work Scope

6. Metric Intent

This metric confirms that all authorized, time-phased discrete work to be accomplished, including details for any significant subcontracted effort and HDV-CI are on the longest path of the schedule. This metric, with integration of the schedule system and HDV-CI, ensures that all HDV-CI items are part of the project schedule.

7. Metric Short Description

HDV-CI, index <> BL IMS [a]

8. Metric

X = Number of items in the HDV-CI list, not in the BL IMS.

Y = Number of items in the HDV-CI list.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF23_{HDV-CI}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[AD]_HDV_description FF23_{HDV-CI}_[E]_HDV_description

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF23_{HDV-CI}_[E]_HDV_description items and, if identified, with the following characteristics. [qualifier]

Determine X items, a subset of Y, based on the following. [X]

Identify FF04_{schedule}_[AD]_HDV_description and, if identified, with the following characteristics. [qualifier]

- FF04_{schedule}_[C]_schedule_type = BL [sch. type]

Count flagged items based on the following operation(s). [qualifier]

- FF04_{schedule}_[AD]_HDV_description = null [operation]

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Pages 11-12, Typical Attributes: "The schedule reflects all the time-phased discrete work to be accomplished that is traceable to the WBS and the Statement of Work. For certain material activities, including production related activities, not all discrete activities are planned in the integrated master schedule as they are managed through an M/ERP or other material management system."

Page 12, Typical Attributes: "Critical target dates, project milestones, contractual events, accomplishment criteria, and project decision points are identified and are being used to plan, status, and monitor progress of the work."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.01.02**	(06.01.02) (23)	automated	monthly

5. Attribute

Authorized, Time-Phased Work Scope

6. Metric Intent

This metric confirms that all incomplete discrete work and PPs to be accomplished is traceable to the cost system and schedule system. This metric ensures that all work identified in the cost system as being incomplete are found in the schedule system and the schedule reflects all the work to be accomplished.

7. Metric Short Description

discrete in EVMS cost tool not in FC IMS

a A

8. Metric

X = Number of incomplete WBS identifiers in the EVMS cost tool that are discrete or PP, not in the FC IMS.

Y = Number of incomplete WBS identifiers in the EVMS cost tool that are discrete or PP.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF04_{schedule}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[G]_WBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP or CA or SLPP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[J]_EV_method <> A or J or NA

Y qualifier WBS type **incomplete** EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

X qualifier sch. type

Count flagged items based on the following operation(s).

- FF04_{schedule}_[G]_WBS = null

qualifier operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Pages 11-12, Typical Attribute(s): "The schedule reflects all the time-phased discrete work to be accomplished that is traceable to the WBS and the Statement of Work. For certain material activities, including production related activities, not all discrete activities are planned in the integrated master schedule as they are managed through an M/ERP or other material management system."

Page 12, Typical Attributes: "Critical target dates, project milestones, contractual events, accomplishment criteria, and project decision points are identified and are being used to plan, status, and monitor progress of the work."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.01**	(06.02.01) (24)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric ensures that the schedule system has no activities showing a % complete value = 100% without having an actual finish date.

7. Metric Short Description

100% complete without actual finish

a F A

8. Metric

X = Number of activities in the FC IMS with % complete = 100%, with no actual finish date.

Y = Number of activities in the FC IMS with % complete = 100%.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[V]_pct_complete

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF03_{cost}_[L]_BCWPc >= FF03_{cost}_[K]_DB (completed)

Y
qualifier
sch. type
other 1

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package…"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.02**	(06.02.02) (25)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric ensures that the schedule system has no activities showing a % complete value > 0% without having an actual start date.

7. Metric Short Description

> 0% complete without actual start

a F A

8. Metric

X = Number of incomplete activities in the FC IMS with % complete > 0%, with no actual start date.

Y = Number of incomplete activities in the FC IMS with % complete > 0%.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[V]_pct_complete

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = FC

sch. type

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

incomplete

- FF04_{schedule}_[V]_pct_complete > 0%

PC

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null OR FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[T]_AS_date = null

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package and planning package (or lower-level task/activity)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.02.03 to 06.02.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.03**	(06.02.03) (26)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric ensures that the schedule system prevents activities from starting or completing before one or more of its predecessors are complete.

7. Metric Short Description

FC IMS out-of-sequence relationships

a A

8. Metric

X = Number of incomplete activity relationships in the FC IMS with early start from last quarter, identified as statused out-of-sequence.

Y = Number of incomplete activity relationships in the FC IMS with early start from last quarter.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} CPP-3_FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[E]_predecessor_ID FF05_{schedule_logic}_[F]_rel_type

13. Assumptions

14. Instructions

Y

Determine Y items based on the following.

qualifier

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

sch. type

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC

incomplete

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

other 1

- FF04_{schedule}_[B]_CPP_status_date for CPP-3 < FF04_{schedule}_[L]_ES_date <= FF04_{schedule}_[B]_CPP_status_date
  OR
  FF04_{schedule}_[B]_CPP_status_date for CPP-3 < FF04_{schedule}_[T]_AS_date <= FF04_{schedule}_[B]_CPP_status_dat

X

Determine X items, a subset of Y, based on the following.

qualifier

Identify FF05_{schedule_logic}_[D]_task_ID and, if identified, with the following characteristics.

sch. type

- FF05_{schedule_logic}_[C]_schedule_type = FC

qualifier

Count flagged items based on the following operation(s).

operation

- IF FF05_{schedule_logic}_[F]_rel_type = FS, (FF04_{schedule}_[T]_AS_date <> null AND FF04_{schedule}_[U]_AF_date of FF05_{schedule_logic}_[E]_predecessor_ID = null)
  OR
  IF FF05_{schedule_logic}_[F]_rel_type = SS, (FF04_{schedule}_[T]_AS_date <> null AND FF04_{schedule}_[T]_AS_date of FF05_{schedule_logic}_[E]_predecessor_ID = null)
  OR
  IF FF05_{schedule_logic}_[F]_rel_type = SS, (FF04_{schedule}_[T]_AS_date = null AND FF04_{schedule}_[T]_AS_date of FF05_{schedule_logic}_[E]_predecessor_ID <> null)
  OR
  IF FF05_{schedule_logic}_[F]_rel_type = SF, (FF04_{schedule}_[U]_AF_date <> null AND FF04_{schedule}_[T]_AS_date of FF05_{schedule_logic}_[E]_predecessor_ID = null)
  OR
  IF FF05_{schedule_logic}_[F]_rel_type = FF, (FF04_{schedule}_[U]_AF_date <> null AND FF04_{schedule}_[U]_AF_date of FF05_{schedule_logic}_[E]_predecessor_ID = null)
  OR
  IF FF05_{schedule_logic}_[F]_rel_type = FF, (FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[U]_AF_date of

FF05_{schedule_logic}_[E]_predecessor_ID <> null)

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package and planning package (or lower-level task/activity)."

Page 12, Typical Attribute(s): "The schedule provides current status and forecasts of completion dates for all discrete authorized work."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.02.02 to 06.02.03.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Section 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.04**	(06.02.04) (27)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric ensures that the schedule system records no activities reporting an actual start date and actual finish date different from the previous month's reporting.

7. Metric Short Description

FC IMS actual start or finish date, prior <> current

a A

8. Metric

X = Number of activities in the FC IMS with actual start or finish dates in prior month, different from current month.

Y = Number of activities in the FC IMS with actual start or finish dates in prior month.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
CPP-1_FF04_{schedule}	FF04_{schedule} CPP-1_FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date CPP-1_FF04_{schedule}_[C]_schedule_type CPP-1_FF04_{schedule}_[D]_task_ID CPP-1_FF04_{schedule}_[E]_task_type CPP-1_FF04_{schedule}_[T]_AS_date CPP-1_FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count CPP-1_FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- CPP-1_FF04_{schedule}_[C]_schedule_type = FC
- CPP-1_FF04_{schedule}_[E]_task_type <> M
- CPP-1_FF04_{schedule}_[T]_AS_date <> null
  OR
  CPP-1_FF04_{schedule}_[U]_AF_date <> null

Y
qualifier
sch. type
task type
other 1

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- CPP-1_FF04_{schedule}_[T]_AS_date <> FF04_{schedule}_[T]_AS_date
  OR
  CPP-1_FF04_{schedule}_[U]_AF_date <> FF04_{schedule}_[U]_AF_date

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package and planning package (or lower-level task/activity)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.05**	(06.02.05) (28)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric, with the integration of the schedule system, ensures that activities and milestones listed on the BL IMS are found on the FC IMS.

7. Metric Short Description

BL IMS not in FC IMS

a B A

8. Metric

X = Number of incomplete activities in the BL IMS, not in the FC IMS.

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Y

qualifier

sch. type

incomplete

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

X

qualifier

sch. type

qualifier

operation

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF04_{schedule}_[D]_task_ID = null

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package and planning package (or lower-level task/activity)."

Page 12, Typical Attribute(s): "The baseline schedule is the basis for measuring performance."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.06**	(06.02.06) (29)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work, within the freeze period. This metric, with the integration of the schedule system, ensures that activities and milestones listed on the FC IMS are found on the BL IMS.

7. Metric Short Description

FC IMS in freeze period not in BL IMS

a F A

8. Metric

X = Number of incomplete activities in the FC IMS in the current freeze period, not in the BL IMS.

Y = Number of incomplete activities in the FC IMS in the current freeze period.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} CPP+1_FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date CPP+1_FF04_{schedule}_[B]_CPP_status_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[L]_ES_date < CPP+1_FF04_{schedule}_[B]_CPP_status_date
  AND
  FF04_{schedule}_[M]_EF_date >= CPP_status_date

Y
qualifier
sch. type
incomplete
other 1

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF04_{schedule}_[D]_task_ID = null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Management Value: "Scheduling authorized work facilitates effective planning, statusing, and forecasting, all of which provide the ability to evaluate and implement actions designed to complete the project effort within contractual parameters. The integration of the technical, schedule, and cost aspects of the project results in the: Time-phasing of authorized discrete work for use as the foundation to establish a valid performance measurement baseline."

Page 12, Typical Attribute(s): "The baseline schedule is the basis for measuring performance."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Split to metrics to 06.02.06 and 06.02.07.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.02.07**	(06.02.07) (30)	automated	monthly

5. Attribute

Schedule Provides Current Status

6. Metric Intent

This metric confirms the current project schedule provides actual status including FC start and finish dates consistent with the month end status (data) date for all work. This metric, with the integration of the schedule system, ensures that activities and milestones listed on the FC IMS are found on the BL IMS.

7. Metric Short Description

FC IMS not in BL IMS

a F

8. Metric

X = Number of incomplete activities in the FC IMS, not in the BL IMS.

Y = Number of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID by FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF04_{schedule}_[D]_task_ID = null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Management Value: "Scheduling authorized work facilitates effective planning, statusing, and forecasting, all of which provide the ability to evaluate and implement actions designed to complete the project effort within contractual parameters. The integration of the technical, schedule, and cost aspects of the project results in the: Time-phasing of authorized discrete work for use as the foundation to establish a valid performance measurement baseline."

Page 12, Typical Attribute(s): "The baseline schedule is the basis for measuring performance."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. New metric from 06.02.06.	2020-02-10	PM-30	2020-02-10	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.01**	(06.03.01) (31)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that all incomplete activities and milestones are assigned at least one predecessor and at least one successor in the BL IMS.

7. Metric Short Description

BL IMS without relationships

a B A

8. Metric

X = Number of incomplete activities in the BL IMS, without predecessors or successors.

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF05_{schedule_logic}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[D]_task_IDsuccessors FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y
qualifier
sch. type
incomplete

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

Determine X items, a subset of Y, based on the following.

X
qualifier
sch. type
qualifier
operation

Identify FF05_{schedule_logic}_[D]_task_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[E]_predecessor_ID = 0/null
  OR
  FF05_{schedule_logic}_[D]_task_IDsuccessors = 0/null

Conduct the following manual operation(s).

manual
operation

- Flagged activity is not project start and/or finish milestone.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.02**	(06.03.02) (32)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that all incomplete activities and milestones are assigned at least one predecessor and at least one successor in the FC IMS.

7. Metric Short Description

FC IMS without relationships

a F A

8. Metric

X = Number of incomplete activities in the FC IMS, without predecessors or successors.

Y = Number of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0.5%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF05_{schedule_logic}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[D]_task_IDsuccessors FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF05_{schedule_logic}_[D]_task_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[E]_predecessor_ID = 0/null
  OR
  FF05_{schedule_logic}_[D]_task_IDsuccessors = 0/null

Conduct the following manual operation(s).

- Flagged activity is not project start and/or finish milestone.

X
qualifier
sch. type
qualifier
operation
manual
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.03.04 to 06.03.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.03**	(06.03.03) (33)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. The metric, with the integration of the schedule system, ensures that there are no SF relationships on incomplete activities in the BL IMS.

7. Metric Short Description

BL IMS SF relationships

a B A

8. Metric

X = Number of relationships of incomplete activities in the BL IMS, that are SF relationship.

Y = Number of relationships of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[F]_rel_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y
qualifier
sch. type

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL,
  FF05_{schedule_logic}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X
qualifier
sch. type

Identify FF05_{schedule_logic}_[D]_task_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = BL

qualifier

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[F]_rel_type = SF

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Re-ID'ed from 06.03.02 to 06.03.03. Sections 10, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.04**	(06.03.04) (34)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there are no SF relationships on incomplete activities in the FC IMS.

7. Metric Short Description

FC IMS SF relationships

a F A

8. Metric

X = Number of relationships of incomplete activities in the FC IMS, that are SF relationship.

Y = Number of relationships of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[F]_rel_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF05_{schedule_logic}_[D]_task_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[F]_rel_type = SF

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.03.05 to 06.03.04.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 10, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.05**	(06.03.05) (35)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use of SS and FF relationships on incomplete activities and milestones in the BL IMS.

7. Metric Short Description

BL IMS SS or FF relationships

a B A

8. Metric

X = Number of relationships of incomplete activities (excludes milestones) in the BL IMS, that are SS or FF relationship.

Y = Number of relationships of incomplete activities (excludes milestones) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
15.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic}	FF05_{schedule_logic}	FF04_{schedule}_[B]_CPP_status_date
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[K]_EV_method
		FF04_{schedule}_[L]_ES_date
		FF04_{schedule}_[M]_EF_date
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF05_{schedule_logic}_[C]_schedule_type
		FF05_{schedule_logic}_[D]_task_ID
		FF05_{schedule_logic}_[F]_rel_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[F]_rel_type,(FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL,
  FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[E]_task_type <> M
  OR
  FF04_{schedule}_[E]_task_type of FF05_{schedule_logic}_[D]_task_ID <> M

task type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[F]_rel_type and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF05_{schedule_logic}_[F]_rel_type = SS
  OR
  FF05_{schedule_logic}_[F]_rel_type = FF

operation

Conduct the following manual operation(s).

manual

- Flagged activity execution not substantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.03.03 to 06.03.05.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.06**	(06.03.06) (36)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use of SS and FF relationships on incomplete activities and milestones in the FC IMS.

7. Metric Short Description

FC IMS SS or FF relationships

a F A

8. Metric

X = Number of relationships of incomplete activities (excludes milestones) in the FC IMS, that are SS or FF relationship.

Y = Number of relationships of incomplete activities (excludes milestones) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
15.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[F]_rel_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[F]_rel_type,(FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC

sch. type

- FF04_{schedule}_[E]_task_type <> M
  OR
  FF04_{schedule}_[E]_task_type of FF05_{schedule_logic}_[D]_task_ID <> M

task type

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[F]_rel_type and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = FC

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF05_{schedule_logic}_[F]_rel_type = SS
  OR
  FF05_{schedule_logic}_[F]_rel_type = FF

operation

Conduct the following manual operation(s).

manual

- Flagged activity execution not substantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 7, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.07**	(06.03.07) (37)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use of lead relationships on incomplete activities and milestones in the BL IMS.

7. Metric Short Description

BL IMS lead relationships

a B A

8. Metric

X = Number of relationships of incomplete activities in the BL IMS, with leads.

Y = Number of relationships of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic}	FF05_{schedule_logic}	FF04_{schedule}_[B]_CPP_status_date
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[L]_ES_date
		FF04_{schedule}_[M]_EF_date
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF05_{schedule_logic}_[C]_schedule_type
		FF05_{schedule_logic}_[F]_rel_type
		FF05_{schedule_logic}_[G]_lag_days

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[F]_rel_type,(FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL,
  FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[F]_rel_type and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF05_{schedule_logic}_[G]_lag_days < 0

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a

critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.08**	(06.03.08) (38)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use of lead relationships on incomplete activities and milestones in the FC IMS.

7. Metric Short Description

FC IMS lead relationships

a F A

8. Metric

X = Number of relationships of incomplete activities in the FC IMS, with leads.

Y = Number of relationships of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic}	FF05_{schedule_logic}	FF04_{schedule}_[C]_schedule_type
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF05_{schedule_logic}_[C]_schedule_type
		FF05_{schedule_logic}_[F]_rel_type
		FF05_{schedule_logic}_[G]_lag_days

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[F]_rel_type,(FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC

sch. type

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[F]_rel_type and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = FC

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF05_{schedule_logic}_[G]_lag_days < 0

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.09**	(06.03.09) (39)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for lags > 22 work days on incomplete activities and milestones in the BL IMS.

7. Metric Short Description

BL IMS lags > 22 work day relationships

a B A

8. Metric

X = Number of relationships of incomplete activities in the BL IMS, with lags > 22 work days and inadequate justification.

Y = Number of relationships of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[D]_task_ID FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[F]_rel_type FF05_{schedule_logic}_[G]_lag_days

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL,
  FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL,
  FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[AH]_justification_narrative <listing>

other 1

Count flagged items based on the following operation(s).

qualifier

- FF05_{schedule_logic}_[G]_lag_days > 22 work days

operation

Conduct the following manual operation(s).

manual

- FF04_{schedule}_[AH]_justification_narrative for lag relationship with predecessor is null or unsubstantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.10**	(06.03.10) (40)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for lags > 22 work days on incomplete activities and milestones in the FC IMS.

7. Metric Short Description

FC IMS lags > 22 work day relationships

a F A

8. Metric

X = Number of relationships of incomplete activities in the FC IMS, with lags > 22 work days and inadequate justification.

Y = Number of relationships of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[F]_rel_type FF05_{schedule_logic}_[G]_lag_days

13. Assumptions

14. Instructions

Y

qualifier

sch. type

incomplete

Determine Y items based on the following.

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

X

qualifier

sch. type

other 1

qualifier

operation

manual

operation

Determine X items, a subset of Y, based on the following.

Identify FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC,
  FF05_{schedule_logic}_[C]_schedule_type = FC
- FF04_{schedule}_[AH]_justification_narrative <listing>

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[G]_lag_days > 22 work days

Conduct the following manual operation(s).

- FF04_{schedule}_[AH]_justification_narrative for lag relationship with predecessor is null or unsubstantiated.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.11**	(06.03.11) (41)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for hard constraints on incomplete activities and milestones in the BL IMS.

7. Metric Short Description

BL IMS with hard constraints

a B H

8. Metric

X = Number of incomplete activities in the BL IMS, with hard constraints and inadequate justification.

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[Q]_SC_type FF04_{schedule}_[S]_FC_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[AH]_justification_narrative <listing>

other 1

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[Q]_SC_type = CS_MANDSTART or CS_MSO or CS_MSOB
  OR
  FF04_{schedule}_[S]_FC_type = CS_MANDFIN or CS_MEO or CS_MEOB

operation

Conduct the following manual operation(s).

manual

- FF04_{schedule}_[AH]_justification_narrative for hard constraint is null or unsubstantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.03.12 to 06.03.11.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.12**	(06.03.12) (42)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for hard constraints on incomplete activities and milestones in the FC IMS.

7. Metric Short Description

FC IMS with hard constraints

a F H

8. Metric

X = Number of incomplete activities in the FC IMS, with hard constraints and inadequate justification.

Y = Number of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[Q]_SC_type FF04_{schedule}_[S]_FC_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[AH]_justification_narrative <listing>

Count flagged items based on the following operation(s).

- FF04_{schedule}_[Q]_SC_type = CS_MANDSTART or CS_MSO or CS_MSOB
  OR
  FF04_{schedule}_[S]_FC_type = CS_MANDFIN or CS_MEO or CS_MEOB

Conduct the following manual operation(s).

- FF04_{schedule}_[AH]_justification_narrative for hard constraint is null or unsubstantiated.

Determine if X or X/Y exceeds the threshold.

X
qualifier
sch. type
other 1
qualifier
operation

manual
operation

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.03.11 to 06.03.12.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.13**	(06.03.13) (43)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for soft constraints on incomplete activities and milestones in the BL IMS.

7. Metric Short Description

BL IMS soft constraints relationships

a B H

8. Metric

X = Number of incomplete activities in the BL IMS, with soft constraints and inadequate justification.

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
15.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[Q]_SC_type FF04_{schedule}_[S]_FC_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[AH]_justification_narrative <listing>

other 1

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[Q]_SC_type = CS_MSOA
  OR
  FF04_{schedule}_[S]_FC_type = CS_ALAP or CS_MEOA

operation

Conduct the following manual operation(s).

manual

- FF04_{schedule}_[AH]_justification_narrative for soft constraint is null or unsubstantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.14**	(06.03.14) (44)	automated/manual verification	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric, with the integration of the schedule system, ensures that there is limited use and justification for soft constraints on incomplete activities and milestones in the FC IMS.

7. Metric Short Description

FC IMS soft constraints relationships

a F H

8. Metric

X = Number of incomplete activities in the FC IMS, with soft constraints and inadequate justification.

Y = Number of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
15.0%		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[Q]_SC_type FF04_{schedule}_[S]_FC_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[AH]_justification_narrative <listing>

Count flagged items based on the following operation(s).

- FF04_{schedule}_[Q]_SC_type = CS_MSOA
  OR
  FF04_{schedule}_[S]_FC_type = CS_ALAP or CS_MEOA

Conduct the following manual operation(s).

- FF04_{schedule}_[AH]_justification_narrative for soft constraint is null or unsubstantiated.

X
qualifier
sch. type
other 1
qualifier
operation

manual
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path..."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.15**	(06.07.03) (45)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric ensures that incomplete discrete activities with an immediate LOE predecessor(s) in the project BL IMS.

7. Metric Short Description

BL IMS discrete successor with LOE predecessor relationships

a A

8. Metric

X = Number of relationships of incomplete discrete activities in the BL IMS, with immediate successors to LOE predecessors.

Y = Number of relationships of incomplete discrete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = BL,
  FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method <> A or J or K or NA

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF05_{schedule_logic}_[E]_predecessor_ID and, if identified, with the following characteristics.

qualifier

- FF05_{schedule_logic}_[C]_schedule_type = BL

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[K]_EV_method = LOE

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished. The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.03.16**	(06.07.04) (46)	automated	monthly

5. Attribute

Horizontal Integration

6. Metric Intent

This metric ensures that incomplete discrete activities with an immediate LOE predecessor(s) in the project FC IMS.

7. Metric Short Description

FC IMS discrete successor with LOE predecessor relationships

a A

8. Metric

X = Number of relationships of incomplete discrete activities in the FC IMS, with immediate successors to LOE activities.

Y = Number of relationships of incomplete discrete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF05_{schedule_logic} FF04_{schedule}	FF05_{schedule_logic} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[D]_task_ID FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Y

Determine Y items based on the following.

qualifier

Count FF05_{schedule_logic}_[D]_task_ID,FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

sch. type

- FF05_{schedule_logic}_[C]_schedule_type = FC,
  FF04_{schedule}_[C]_schedule_type = FC

incomplete

- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

EVT

- FF04_{schedule}_[K]_EV_method <> A or J or K or NA

X

Determine X items, a subset of Y, based on the following.

qualifier

Identify FF05_{schedule_logic}_[E]_predecessor_ID and, if identified, with the following characteristics.

sch. type

- FF05_{schedule_logic}_[C]_schedule_type = FC

qualifier

Count flagged items based on the following operation(s).

operation

- FF04_{schedule}_[K]_EV_method = LOE

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished. The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.04.01**	(06.04.01) (47)	automated/manual	monthly

5. Attribute

Vertical Integration

6. Metric Intent

This metric confirms that there is vertical schedule integration, (i.e., consistency of data between various levels of schedules including subcontractor and field level schedules) and that all levels of schedules align. This metric identifies incomplete activities with BL start and finish dates not consistent with the BL start and finish dates for the same activities in the master schedule and/or the project schedule.

7. Metric Short Description

BL IMS start or finish dates outside top level schedule

8. Metric

X = Number of incomplete activities in the BL IMS, with start or finish dates outside the higher level project BL start or finish dates depicted at the top level schedule (master).

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} master or customer BL schedule	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[L]_ES_date <listing>
- FF04_{schedule}_[M]_EF_date <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- FF04_{schedule}_[L]_ES_date < master or customer BL schedule start date
  OR
  FF04_{schedule}_[M]_EF_date > master or customer BL schedule finish date

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.04.02**	(06.04.02) (48)	automated/manual	monthly

5. Attribute

Vertical Integration

6. Metric Intent

This metric confirms that there is vertical schedule integration, (i.e., consistency of data between various levels of schedules including subcontractor and field level schedules) and that all levels of schedules align. This metric identifies incomplete activities with FC start and finish dates not consistent with the FC start and finish dates for the same activities in the master schedule and/or the project schedule.

7. Metric Short Description

FC IMS start or finish dates outside top level schedule

8. Metric

X = Number of incomplete activities (excludes summaries, SMs, SVTs, and ZBAs) in the FC IMS, with start and finish dates different from the higher level master project FC IMS start and finish dates.

Y = Number of incomplete activities (excludes summaries, SMs, SVTs, and ZBAs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} master or customer FC schedule	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[L]_ES_date <listing>
- FF04_{schedule}_[M]_EF_date <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- FF04_{schedule}_[L]_ES_date < master or customer FC schedule start date
  OR
  FF04_{schedule}_[M]_EF_date > master or customer FC schedule finish date

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
task type
incomplete
other 1
other 2
X
qualifier
operation

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.04.03**	(06.04.03) (49)	automated/manual	monthly

5. Attribute

Vertical Integration

6. Metric Intent

This metric confirms that there is vertical schedule integration, (i.e., consistency of data between various levels of schedules including subcontractor and field level schedules) and that all levels of schedules align. This metric identifies incomplete activities found in supplemental schedules with FC start and finish dates different from the FC start and finish dates listed in the project schedule.

7. Metric Short Description

FC IMS start or finish dates different from supplemental FC schedule

8. Metric

X = Number of incomplete activities (excludes summaries, SMs, SVTs, and ZBAs) in the FC IMS, with start and finish dates different from the start and finish dates in the supplemental FC schedule.

Y = Number of incomplete activities (excludes summaries, SMs, SVTs, and ZBAs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} prime contractor's supplemental schedules	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[L]_ES_date <listing>
- FF04_{schedule}_[M]_EF_date <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- FF04_{schedule}_[L]_ES_date <> prime contractor's supplemental schedule FC start date
  OR
  FF04_{schedule}_[M]_EF_date <> prime contractor's supplemental schedule FC finish date

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
task type
incomplete
other 1
other 2

X
qualifier
operation

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.01**	(06.05.01) (50)	automated	monthly

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric confirms the network schedule assigns resources to all activities in the BL IMS excluding SVT activities, SM activities, ZBA activities, SM activities, and milestones. This metric ensures resources are available to support the BL schedule.00

7. Metric Short Description

BL IMS without resources

a B H

8. Metric

X = Number of incomplete activities (excludes milestones, SMs, SVTs, and ZBAs) in the BL IMS, without resources.

Y = Number of incomplete activities (excludes milestones, SMs, SVTs, and ZBAs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF06_{schedule_resources}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AF]_BAC FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[I]_budget_units FF06_{schedule_resources}_[J]_budget_dollars

13. Assumptions

14. Instructions

Y

qualifier

sch. type

task type

incomplete

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type <> SVT or SM or ZBA or M
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

X

qualifier

sch. type

qualifier

operation

Determine X items, a subset of Y, based on the following.

Identify FF06_{schedule_resources}_[E]_task_ID and, if identified, with the following characteristics.

- FF06_{schedule_resources}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF06_{schedule_resources}_[I]_budget_units = 0/null
  OR
  FF06_{schedule_resources}_[J]_budget_dollars = 0/null

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.02**	(06.05.02) (51)	automated	monthly

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric confirms the network schedule assigns resources to all activities in the FC IMS excluding SVT activities, SM activities, ZBA activities, SM activities, and milestones. This metric ensures resources are available to support the FC schedule.

7. Metric Short Description

FC IMS without resources

a F H

8. Metric

X = Number of incomplete activities (excludes milestones, SMs, SVTs, and ZBAs) in the FC IMS, without resources.

Y = Number of incomplete activities (excludes milestones, SMs, SVTs, and ZBAs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF06_{schedule_resources}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AF]_BAC FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[I]_budget_units FF06_{schedule_resources}_[J]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type <> SVT or SM or ZBA or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
task type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF06_{schedule_resources}_[E]_task_ID and, if identified, with the following characteristics.

- FF06_{schedule_resources}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF06_{schedule_resources}_[I]_budget_units = 0/null
  OR
  FF06_{schedule_resources}_[J]_budget_dollars = 0/null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 6, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.03**	(06.05.03) (52)	automated	monthly

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric confirms the network schedule does not assign resources to incomplete SVT activities, SM activities, ZBA activities, SM activities, and milestones in the BL IMS.

7. Metric Short Description

BL IMS milestones, SMs, SVTs, and ZBAs with resources

a B H

8. Metric

X = Number of incomplete milestone, SM, SVT, and ZBA activities in the BL IMS, with resources.

Y = Number of incomplete milestone, SM, SVT, and ZBA activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF06_{schedule_resources}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AF]_BAC FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[I]_budget_units FF06_{schedule_resources}_[J]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

qualifier

sch. type

task type

incomplete

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type = SVT or SM or ZBA or M
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

Determine X items, a subset of Y, based on the following.

X

qualifier

sch. type

qualifier

operation

Identify FF06_{schedule_resources}_[E]_task_ID and, if identified, with the following characteristics.

- FF06_{schedule_resources}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF06_{schedule_resources}_[I]_budget_units <> 0/null
  OR
  FF06_{schedule_resources}_[J]_budget_dollars <> 0/null
  OR
  FF04_{schedule}_[AF]_BAC <> 0/null

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 6, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.04**	(06.05.04) (53)	automated	monthly

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric confirms the network schedule does not assign resources to incomplete SVT activities, SM activities, ZBA activities, SM activities, and milestones in the FC IMS.

7. Metric Short Description

FC IMS milestones, SMs, SVTs, and ZBAs with resources

a F H

8. Metric

X = Number of incomplete milestone, SM, SVT, and ZBA activities in the FC IMS, with resources.

Y = Number of incomplete milestone, SM, SVT, and ZBA activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF06_{schedule_resources} FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AF]_BAC FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[I]_budget_units FF06_{schedule_resources}_[J]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = SVT or SM or ZBA or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Y
qualifier
sch. type
task type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF06_{schedule_resources}_[E]_task_ID and, if identified, with the following characteristics.

- FF06_{schedule_resources}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF06_{schedule_resources}_[I]_budget_units <> 0/null
  OR
  FF06_{schedule_resources}_[J]_budget_dollars <> 0/null
  OR
  FF04_{schedule}_[AF]_BAC <> 0/null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.06**	(06.05.06) (54)	automated/manual verification	monthly

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric confirms SVT activities with resources is action oriented and represents funding, and ZBA activities are not limited to construction engineering support subcontract activities.

7. Metric Short Description

FC IMS SVT with resources and ZBA unsubstantiated [a]

8. Metric

X = Number of incomplete activities in the FC IMS, where
1. SVT activities with resources is action oriented and represents funding, or
2. ZBA activities are not limited to construction engineering support subcontract activities.

Y = Number of incomplete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
20.0%		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following. **Y**

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics. qualifier

- FF04_{schedule}_[C]_schedule_type = FC sch. type
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null **incomplete**
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null

Determine X items, a subset of Y, based on the following. **X**

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics. qualifier

- FF04_{schedule}_[C]_schedule_type = FC sch. type

Count flagged items based on the following operation(s). qualifier

- FF04_{schedule}_[E]_task_type = SVT or ZBA operation

Conduct the following manual operation(s). **manual**

- 1. SVT activities with resources is action oriented and represents funding, or
  2. ZBA activities are not limited to construction engineering support subcontract activities. operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Resource estimates from the budget plan are reasonable and resources are available to support the schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. New metric.	2020-02-10	PM-30	2020-02-10	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.07**	(06.06.02) (55)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric assesses the reasonableness of the BL IMS by validating the activity's duration considering resource requirements and availability, and the hours needed to complete the work scope.

7. Metric Short Description

BL IMS resource loading not reasonable

I H

8. Metric

X = Number of activities by resource in the BL IMS that are not resourced or the activity start and finish dates do not align with the resource start and finish dates.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

X artifact(s)

xer BL

13. Assumptions

Review resource profiles in P6: select view > show on bottom > resource usage profile > right-click in profile graph box > resource usage profile options > check remaining early and late boxes by date.

14. Instructions

manual

Conduct the following manual operation(s).

operation

- Resource loading in the BL schedule is not reasonable when compared against resource requirements, resource availability, and WP and PP durations.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 19, Typical Attribute(s): "Resource plan. Identifies the resources needed to accomplish the work and assign resources to tasks in the integrated master schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.05.08**	(06.06.03) (56)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Integrated Master Schedule (IMS) Resources

6. Metric Intent

This metric assesses the reasonableness of the FC IMS by validating the activity's duration considering resource requirements and availability, and the hours needed to complete the work scope.

7. Metric Short Description

FC IMS resource loading not reasonable

I H

8. Metric

X = Number of activities by resource in the FC IMS that are not resourced or the activity start and finish dates do not align with the resource start and finish dates.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

X artifact(s)

xer FC

13. Assumptions

Review resource profiles in P6: select view > show on bottom > resource usage profile > right-click in profile graph box > resource usage profile options > check remaining early and late boxes by date.

14. Instructions

Conduct the following manual operation(s).

manual operation

- Resource loading in the FC schedule is not reasonable when compared against resource requirements, resource availability, and WP and PP durations.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 19, Typical Attribute(s): "Resource plan. Identifies the resources needed to accomplish the work and assign resources to tasks in the integrated master schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.06.01**	(06.06.01) (57)	automated	monthly

5. Attribute

Schedule Detail

6. Metric Intent

This metric confirms the network schedule does not assign resources to incomplete SVT activities in the BL IMS. This metric with the schedule system ensures resource estimates for the budget plan are reasonable, and resources are available to support the BL IMS.

7. Metric Short Description

BL IMS > 44 work days

a B A

8. Metric

X = Number of incomplete activities (excludes milestones, summaries, SMs, SVTs, ZBAs, EVT LOEs, and PPs) in the BL IMS, with duration > 44 work days.

Y = Number of incomplete activities (excludes milestones, summaries, SMs, SVTs, ZBAs, EVT LOEs, and PPs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[W]_orig_duration

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type = A
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method <> LOE or PP

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[W]_orig_duration > 44 work days

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
task type
incomplete
EVT
X
qualifier
qualifier
operation

15. Reference(s)

Page 11, Intent: "There is a clear definition of what constitutes commencement and completion of each work package and planning package (or lower-level task/activity)."

Page 12, Typical Attribute(s): "The baseline schedule is the basis for measuring performance."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.01**	(06.03.15) (58)	manual	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric ensures the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric assesses the adequacy of the FC IMS network logic by simulating a schedule slip using a select number of discrete activities within the current six-month window having a total float value between 10-100 days float. The simulation verifies any changes made to the end milestone and longest path.

7. Metric Short Description

FC IMS push test

8. Metric

X = FC IMS push test result is not consistent with change.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

X artifact(s)
xer FC

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- Push Test
  1. Constrain CD-4 activity (or activity at end of project) to "Finish On or Before."
  2. Choose a discrete activity within the current 6 month window that is discrete and between 10 to 100 days total float and not on longest path.
  3. Add 500 day duration to the selected activity.
  4. Reschedule the project.
  5. Verify the results.
     a. The total float of the statused activities are now prior minus 500 days.
     b. The change to the end milestone which should be negative by the same amount as 5a.
     c. The negative float toal is reasonable - that the longest path changed and the right activities were impacted.
     d. LOE did not become a longest path activity.
  6. Select another activity in a different WBS and repeat the test.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path... The schedule should be designed for effective integrated program management purposes and contain a critical path for the entire contractual period of performance."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 7 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.02**	(06.03.16) (59)	manual	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric assesses the adequacy of the FC IMS network logic by simulating a schedule adjustment by changing the constraint date to the current status date. The simulation verifies that the prior longest path remains the longest path. Also, the simulation ensures that LOE is not driving discrete work scope with the repositioning of select LOE activities.

7. Metric Short Description

FC IMS pull test

8. Metric

X = FC IMS pull test result is not consistent with change.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

X artifact(s)
xer FC

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- Pull Test #1
  1. Select the last discrete activity in the schedule that is constrained.
  2. Change the constraint date to the current status date.
  3. Reschedule the project.
  4. Verify the results.
     a. No discrete activity should have 0 or positive float.
     b. The prior longest path should be still the longest path.

  Pull Test #2
  1. Select a future LOE activity.
  2. Change the start date to the current status date.
  3. Reschedule the project.
  4. Verify results.
     a. No other discrete activities should be associated with the repositioning of the LOE activity.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path... The schedule should be designed for effective integrated program management purposes and contain a critical path for the entire contractual period of performance."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.03**	(06.03.17) (60)	automated/manual verification	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development.

7. Metric Short Description

BL IMS on longest path

a B A

8. Metric

X = Number of incomplete activities (excludes EVT LOEs) in the BL IMS, on the longest path.

Y = Number of incomplete activities (excludes EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
40.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Y

qualifier

sch. type

incomplete

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method <> LOE

EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AB]_is_critical = yes

Conduct the following manual operation(s).

- The longest path is not reasonably defined.

Determine if X or X/Y exceeds the threshold.

X

qualifier

qualifier

operation

manual

operation

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path... The schedule should be designed for effective integrated program management purposes and contain a critical path for the

entire contractual period of performance."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.04**	(06.03.18) (61)	automated/manual verification	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and clearly identify interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development.

7. Metric Short Description

FC IMS on longest path

a F A

8. Metric

X = Number of incomplete activities (excludes EVT LOEs) in the FC IMS, on the longest path.

Y = Number of incomplete activities (excludes EVT LOEs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
40.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[K]_EV_method <> LOE

Y
qualifier
sch. type
incomplete
EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AB]_is_critical = yes

Conduct the following manual operation(s).

- The longest path is not reasonably defined.

X
qualifier
qualifier
operation
manual
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The schedule describes the sequence of work and should consider the significant interdependencies that are indicative of the actual way the work is to be accomplished..."

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path... The schedule should be designed for effective integrated program management purposes and contain a critical path for the entire contractual period of performance."

Page 12, Typical Attribute(s): "The schedule network relationships support the development of a critical path for development projects."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.05**	(06.07.01) (62)	automated	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric ensures that LOE work is not on the longest path through the BL IMS.

7. Metric Short Description

BL IMS, LOE on longest path

a B A

8. Metric

X = Number of incomplete activities (only EVT LOEs) in the BL IMS, on the longest path.

Y = Number of incomplete activities (only EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} xer BL	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Y

Determine Y items based on the following.

qualifier

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method = LOE

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[AB]_is_critical = yes

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The critical path is comprised of the longest sequence of tasks driving project completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.06**	(06.07.02) (63)	automated/manual verification	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric ensures that LOE work is not on the longest path through the FC IMS.

7. Metric Short Description

FC IMS, LOE on longest path

a F A

8. Metric

X = Number of incomplete activities (only EVT LOEs) in the FC IMS, on the longest path.

Y = Number of incomplete activities (only EVT LOEs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} xer FC	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[K]_EV_method = LOE

Y

qualifier

sch. type

incomplete

EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AB]_is_critical = yes

X

qualifier

qualifier

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The scheduling process establishes an integrated master schedule (IMS) that is the logical sequence of all authorized discrete work that leads through all key milestones, events, or decision points required to ensure completion of the project's objectives."

Page 12, Typical Attribute(s): "The critical path is comprised of the longest sequence of tasks driving project completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.07**	(06.07.05) (64)	automated	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric ensures that incomplete discrete activities and milestones do not have more than 15 predecessor activities in the project FC IMS. A merge hotspot is an indication as to how complex the start of an activity is, and if the number of links is > 15, there is a high probability that the activity in question is associated with the wrong predecessor, and/or the activity will be delayed due to the cumulative effect of all links having to complete on time in order for the activity to start on time.

7. Metric Short Description

BL IMS with > 15 predecessors

a B A

8. Metric

X = Number of incomplete activities (excludes summaries, SMs, SVTs, ZBAs, and EVT LOEs) in the BL IMS, with > 15 predecessor activities.

Y = Number of incomplete activities (excludes summaries, SMs, SVTs, ZBAs, and EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF01_{WBS}	FF05_{schedule_logic}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method <> LOE

Y
qualifier
sch. type
task type
incomplete
EVT

Determine X items, a subset of Y, based on the following.

Identify FF05_{schedule_logic}_[E]_predecessor_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[E]_predecessor_ID >15

Determine if X or X/Y exceeds the threshold.

X
qualifier
sch. type
qualifier
operation

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.07.06 to 06.07.05.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.08**	(06.07.06) (65)	automated	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric ensures that incomplete discrete activities and milestones do not have more than 15 predecessor activities in the project BL IMS. A merge hotspot is an indication as to how complex the start of an activity is, and if the number of links is > 15, there is a high probability that the activity in question is associated with the wrong predecessor, and/or the activity will be delayed due to the cumulative effect of all links having to complete on time in order for the activity to start on time.

7. Metric Short Description

FC IMS with > 15 predecessors

a F A

8. Metric

X = Number of incomplete activities (excludes summaries, SMs, SVTs, ZBAs, and EVT LOEs) in the FC IMS, with > 15 predecessor activities.

Y = Number of incomplete activities (excludes summaries, SMs, SVTs, ZBAs, and EVT LOEs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF05_{schedule_logic}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF05_{schedule_logic}_[C]_schedule_type FF05_{schedule_logic}_[E]_predecessor_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[K]_EV_method <> LOE

Y
qualifier
sch. type
task type
incomplete
EVT

Determine X items, a subset of Y, based on the following.

Identify FF05_{schedule_logic}_[E]_predecessor_ID and, if identified, with the following characteristics.

- FF05_{schedule_logic}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF05_{schedule_logic}_[E]_predecessor_ID >15

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.07.05 to 06.07.06.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.09**	(06.07.07) (66)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Critical Path and Float

6. Metric Intent

This metric determines whether the BL longest path follows a logical sequence of work i.e., design, construction, test, commission, etc. The longest path is the longest distance between the start and the finish dates of the project.

7. Metric Short Description

BL IMS longest path not reasonable

8. Metric

X = Number of activities on the longest path in the BL IMS, where the longest path activity does not follow a logical sequence of work i.e., design, construction, test, commission, etc.

Y = Number of activities on the longest path in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	xer BL	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[AB]_is_critical

13. Assumptions

FF04_{schedule}_[AB]_is_critical is the longest, continuous (critical) path.
Changes in float >20 work days indicate work moved forward or backward.

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[AB]_is_critical = yes

Y
qualifier
sch. type
other 2

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- The longest path activity does not follow a logical sequence of work i.e., design, construction, test, commission, etc.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "...The critical path is comprised of the longest sequence of tasks driving project completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.07.08 to 06.07.07.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.10**	(06.07.08) (67)	automated/manual	monthly or when compliance personnel participate IPT meeting

5. Attribute

Critical Path and Float

6. Metric Intent

This metric determines whether the FC longest path follows a logical sequence of work i.e., design, construction, test, commission, etc. The longest path is the longest distance between the start and the finish dates of the project.

7. Metric Short Description

FC IMS longest path not reasonable

8. Metric

X = Number of activities on the longest path in the FC IMS, where the longest path activity does not follow a logical sequence of work i.e., design, construction, test, commission, etc.

Y = Number of activities on the longest path in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	xer FC	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[AB]_is_critical

13. Assumptions

FF04_{schedule}_[AB]_is_critical is the longest, continuous (critical) path.
Changes in float >20 work days indicate work moved forward or backward.

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[AB]_is_critical = yes

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- The longest path activity does not follow a logical sequence of work i.e., design, construction, test, commission, etc.

Determine if X or X/Y exceeds the threshold.

Y

qualifier

sch. type

other 2

X

qualifier

operation

15. Reference(s)

Page 12, Typical Attribute(s): "...The critical path is comprised of the longest sequence of tasks driving project completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.07.07 to 06.07.08.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.11**	(06.07.09) (68)	automated/manual verification	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms that BL IMS total float values are reasonable. This metric is designated for any activity with a total float >= 10% of the project's remaining duration.

7. Metric Short Description

BL IMS total float not reasonable

8. Metric

X = Number of incomplete discrete activities in the BL IMS, where total float >= 10% of the number of work days from the CPP status date to the planned completion date.

Y = Number of incomplete discrete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	xer BL	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AA]_total_float FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

251 work days in a FY (365 calendar days - weekends - 11 federal holidays)

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[E]_task_type = A or M

task type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method <> A or J or K or NA

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[AA]_total_float <= (FF04_{schedule}_[B]_CPP_status_date - (earliest FF04_{schedule}_[M]_EF_date where FF04_{schedule}_[E]_task_type = SM)) * (number of work days per FY)/365 * 10%

operation

Conduct the following manual operation(s).

manual

- FF04_{schedule}_[AH]_justification_narrative for high float is null or unsubstantiated.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.12**	(06.07.10) (69)	automated/manual verification	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms that FC IMS total float values are reasonable. This metric is designated for any activity with a total float >= 10% of the project's remaining duration.

7. Metric Short Description

FC IMS total float not reasonable

8. Metric

X = Number of incomplete discrete activities in the FC IMS, where total float >= 10% of the number of work days from the CPP status date to the estimated completion date.

Y = Number of incomplete discrete activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	xer FC	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AA]_total_float FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

251 work days in a FY (365 calendar days - weekends - 11 federal holidays)

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = A or M
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[K]_EV_method <> A or J or K or NA

Y
qualifier
sch. type
task type
incomplete
EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AA]_total_float <= (FF04_{schedule}_[B]_CPP_status_date - (earliest FF04_{schedule}_[M]_EF_date where FF04_{schedule}_[E]_task_type = SM)) * (number of work days per FY)/365 * 10%

Conduct the following manual operation(s).

- FF04_{schedule}_[AH]_justification_narrative for high float is null or unsubstantiated.

X
qualifier
sch. type
qualifier
operation
manual
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.07.13**	(06.07.11) (70)	automated	monthly

5. Attribute

Critical Path and Float

6. Metric Intent

This metric confirms the total float values for all project schedule activities.

7. Metric Short Description

BL IMS with negative total float

a B

8. Metric

X = Number of incomplete activities in the BL IMS, with negative total float.

Y = Number of incomplete activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AA]_total_float

13. Assumptions

This is a BL only metric.

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

Y
qualifier
sch. type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AA]_total_float < 0

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 12, Typical Attribute(s): "Significant interdependences should be defined at a consistent level of detail to support development of a critical path. The minimum level linkage is at the work package and planning package level. The schedule should be designed for effective integrated program management purposes and contain a critical path for the entire contractual period of performance."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.08.01**	(06.08.01) (71)	automated/manual verification	monthly

5. Attribute

Schedule Margin (SM)

6. Metric Intent

This metric confirms the SM (if any) identified in the project schedule is logically and appropriately planned. In this way, SM designated activities identified in the project BL IMS are linked to the CD-4 milestone or the DOE contingency activity (if any) preceding the CD-4 milestone.

7. Metric Short Description

BL IMS no SM or not linked to DOE

a H

8. Metric

X = Number of SM activities in the BL IMS, is 0 or is not linked to CD-4 or DOE contingency.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.0

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[I]_task_description

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[E]_task_type = SM

Count flagged items based on the following operation(s).

- FF04_{schedule}_[E]_task_type = 0/null

Conduct the following manual operation(s).

- FF04_{schedule}_[I]_task_description or successor is not related to CD-4 or DOE contingency

Determine if X or X/Y exceeds the threshold.

x
qualifier
sch. type
other 1
qualifier
operation
manual
operation

15. Reference(s)

See PASEG, Section 5.12, page 75: "Program teams should follow the following guidelines when using Schedule Margin:
• Schedule Margin should be represented in both the Baseline and Forecast schedules
• Schedule Margin tasks should be restricted to an appropriate number of occurrences based on managing risk to increase schedule accuracy
• Schedule Margin duration should be the Program Manager's assessment of the amount of remaining schedule risk/uncertainty to the subsequent event
• Schedule Margin duration should be justifiable and traceable to the program’s risk management system
• Schedule Margin tasks should be clearly and consistently identifiable
• Schedule Margin should be placed as the last task/activity before key contractual events, significant logical integration/test milestones, end item deliverables, or contract completion"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.08.02**	(06.08.02) (72)	automated/manual verification	monthly

5. Attribute

Schedule Margin (SM)

6. Metric Intent

This metric confirms the SM (if any) identified in the project schedule is logically and appropriately planned. In this way, SM designated activities identified in the project FC IMS are linked to the CD-4 milestone or the DOE contingency activity (if any) preceding the CD-4 milestone.

7. Metric Short Description

FC IMS no SM or not linked to DOE

a H

8. Metric

X = Number of SM activities in the FC IMS, is 0 or is not linked to CD-4 or DOE contingency.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.0

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[I]_task_description

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = SM

Count flagged items based on the following operation(s).

- FF04_{schedule}_[E]_task_type = 0/null

Conduct the following manual operation(s).

- FF04_{schedule}_[I]_task_description or successor is not related to CD-4 or DOE contingency

Determine if X or X/Y exceeds the threshold.

x
qualifier
sch. type
other 1
qualifier
operation
manual
operation

15. Reference(s)

See PASEG, Section 5.12, page 75: "Program teams should follow the following guidelines when using Schedule Margin:
• Schedule Margin should be represented in both the Baseline and Forecast schedules
• Schedule Margin tasks should be restricted to an appropriate number of occurrences based on managing risk to increase schedule accuracy
• Schedule Margin duration should be the Program Manager's assessment of the amount of remaining schedule risk/uncertainty to the subsequent event
• Schedule Margin duration should be justifiable and traceable to the program's risk management system
• Schedule Margin tasks should be clearly and consistently identifiable
• Schedule Margin should be placed as the last task/activity before key contractual events, significant logical integration/test milestones, end item deliverables, or contract completion"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.08.03**	(06.08.05) (73)	automated/manual verification	monthly

5. Attribute

Schedule Margin (SM)

6. Metric Intent

This metric ensures the SM duration is commensurate with schedule risk and if the SM duration < 10% of the project's remaining duration.

7. Metric Short Description

FC IMS SM remaining duration low

a H

8. Metric

X = Number of SM activities in the FC IMS, where remaining SM duration < 10% of remaining duration.
Also,
Verify SM remaining durations are commensurate with the schedule risk.

Y = Number of SM activities in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule} schedule risk documentation	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[X]_rem_duration

13. Assumptions

There may be more than one SM task type.
SM is after the to-go work.

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type = SM

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[X]_rem_duration < 10% of (FF04_{schedule}_[L]_ES_date - FF04_{schedule}_[B]_CPP_status_date)

Conduct the following manual operation(s).

- Verify SM remaining durations are commensurate with the schedule risk.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
other 1

X
qualifier
qualifier
operation
manual
operation

15. Reference(s)

See PASEG, Section 5.12, page 75: "Program teams should follow the following guidelines when using Schedule Margin:
• Schedule Margin should be represented in both the Baseline and Forecast schedules
• Schedule Margin tasks should be restricted to an appropriate number of occurrences based on managing risk to increase schedule accuracy
• Schedule Margin duration should be the Program Manager's assessment of the amount of remaining schedule risk/uncertainty to the subsequent event
• Schedule Margin duration should be justifiable and traceable to the program's risk management system
• Schedule Margin tasks should be clearly and consistently identifiable
• Schedule Margin should be placed as the last task/activity before key contractual events, significant logical integration/test milestones, end item deliverables, or contract completion"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.09.01**	(07.01.01) (74)	automated/manual	monthly

5. Attribute

Progress Measures and Indicators

6. Metric Intent

This metric confirms that meaningful and objective completion criteria align with the technical performance goals used for measuring the progress of milestones, events, and other indicators. The identification of objective interim performance measures within CAs. The BL IMS should be directly traceable to technical performance goals and should include all the elements associated with the design, construction, and delivery of the product and IMP. This metric identifies incomplete critical key milestones/deliverables and control point dates (i.e., delivery dates) that are not represented in the BL IMS.

7. Metric Short Description

BL IMS missing key activities

I H

8. Metric

X = Number of incomplete key milestones, deliverables, and control point dates in the contract work scope/federal directed scope documents/IMP, not in the BL IMS.

Y = Number of incomplete key milestones, deliverables, and control point dates in the contract work scope/federal directed scope documents/IMP.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	scope documents (e.g., contract, PEP, PMP, conceptual design report,…)	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

List of schedule tasks are X values.

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[E]_task_type = M

task type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[M]_EF_date <listing>

other 1

Determine X items, a subset of Y, based on the following.

X

Manually count flagged items based on the following operation(s).

qualifier

- Determine if the contract work scope/federal directed scope documents/IMP milestones/deliverables are in the schedule and dates align.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 13, Intent: "Identify objective interim performance measures within control accounts (or lower-level tasks/activities) to enable accurate performance assessment each month."

Page 13, Typical Attribute(s): "Interim milestones and lower-tier tasks serve as indicators of progress against which the control account manager monitors progress."

PASEG, page 28: "An IMS with an IMP-driven Architecture incorporates the IMP events, accomplishments, and criteria into its framework. Add detailed tasks to depict the steps required to satisfy criterion. An IMP-based IMS focuses attention on completing the tasks satisfying the entrance and exit criteria for the events and assessing progress towards completing those events..."

PASEG, page 30: "...Ensure that the IMS tasks are traceable to the IMP events that they support (i.e. tie tasks that supports CDR to CDR Criteria).
Ensure that each lowest level architectural element is supported by a least one IMS task and that each IMS task supports a lowest level architectural element..."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 07.01.02 to 07.01.01.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.10.01**	(08.02.01) (75)	manual	monthly

5. Attribute

Time-Phased Performance Measurement Baseline (PMB)

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and identifies interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric assesses the adequacy of the BL IMS network logic by simulating a schedule slip using a select number of discrete activities within the current six-month window having a total float value between 10 to 100 days float. The simulation verifies any changes made to the end milestone and longest path.

7. Metric Short Description

BL IMS push test

8. Metric

X = BL IMS push test result is not consistent with change.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.5

12. Needed Artifacts and Data Elements

X artifact(s)
xer BL

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- Push Test
  1. Constrain CD-4 activity (or activity at end of project) to "Finish On or Before."
  2. Choose a discrete activity within the current 6 month window that is discrete and between 10 to 100 days total float and not on longest path.
  3. Add 500 day duration to the selected activity.
  4. Reschedule the project.
  5. Verify the results.
     a. The total float of the statused activities are now prior total float minus 500 days.
     b. The change to the end milestone which should be negative by the same amount as 5a.
     c. LOE did not become a longest path activity.
  6. Select another activity in a different WBS and repeat the test.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 14, Intent: "The PMB represents the time-phased scope, schedule, and associated budget through the end of the contract."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 7 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
B	**B.10.02**	(08.02.02) (76)	manual	monthly

5. Attribute

Time-Phased Performance Measurement Baseline (PMB)

6. Metric Intent

This metric confirms the network schedule describes the sequence of work (horizontal integration) and identifies interdependencies that are indicative of the actual way the work is planned and accomplished at the level of detail to support project longest path development. This metric assesses the adequacy of the BL IMS network logic by simulating a schedule adjustment by changing the constraint date to the current status date. The simulation verifies that the prior longest path remains the longest path. Also, the simulation verifies that LOE is not driving discrete work scope with the repositioning of select LOE activities.

7. Metric Short Description

BL IMS pull test

8. Metric

X = BL IMS pull test result is not consistent with change.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.5

12. Needed Artifacts and Data Elements

X artifact(s)
xer BL

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- Pull Test #1
  1. Select the last discrete activity in the schedule that is constrained.
  2. Change the constraint date to the current status date.
  3. Reschedule the project.
  4. Verify the results.
     a. No discrete activity should have 0 or positive float.
     b. The prior longest path should be still the longest path.

  Pull Test #2
  1. Select a future LOE activity.
  2. Change the start date to the current status date.
  3. Reschedule the project.
  4. Verify results.
     a. No other discrete activities should be associated with the repositioning of the LOE activity.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 14, Intent: "The PMB represents the time-phased scope, schedule, and associated budget through the end of the contract."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.01.01**	(08.01.01) (77)	manual	monthly

5. Attribute

Scope, Schedule and Budget Alignment

6. Metric Intent

This test confirms that scope, schedule, and budget align. The metric identifies any difference between the IPMR F1 PMB value, excluding the UB value, and the dollarized RAM total value.

7. Metric Short Description

PMB, IPMR F1 <> dollarized RAM

a A

8. Metric

X = Number of CA WBSs in the RAM, where RAM CA CAM <> WBS index CAM or RAM CA DB <> IPMR F1 DB or RAM OBS DB <> IPMR F2 DB.

Y = Number of CA WBSs in the RAM.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS} FF08_{IPMR_F1} FF09_{IPMR_F2}	RAM	FF01_{WBS}_[I]_CAM FF08_{IPMR_F1}_[J]_BAC FF09_{IPMR_F2}_[J]_BAC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y qualifier

Count RAM CA,RAM CA CAM,RAM CA DB,RAM OBS DB items and, if identified, with the following characteristics.

Determine X items, a subset of Y, based on the following.

X qualifier

Identify FF01_{WBS}_[I]_CAM,FF08_{IPMR_F1}_[J]_BAC,FF09_{IPMR_F2}_[J]_BAC and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

qualifier

operation

- RAM CA CAM <> FF01_{WBS}_[I]_CAM
  OR
  RAM CA DB <> FF08_{IPMR_F1}_[J]_BAC
  OR
  RAM OBS DB <>FF09_{IPMR_F2}_[J]_BAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 14, Intent: "The assignment of budgets to scheduled segments of work produces a plan against which actual performance can be compared. This is called the Performance Measurement Baseline (PMB)."

Page 17, Typical Attribute(s): "The PMB reflects the budget value for the work scope in all control accounts, summary level planning packages, and undistributed budget."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.01.02**	(08.01.02) (78)	automated	monthly

5. Attribute

Scope, Schedule and Budget Alignment

6. Metric Intent

This metric confirms that scope, schedule, and budget align. The metric identifies the count of incomplete WPs/PPs where BAC labor hour values in the cost system do not match the BAC labor hour values in the schedule system.

7. Metric Short Description

DB labor units, EVMS cost tool <> BL IMS [a]

8. Metric

X = Number of incomplete WP and PP WBSs (only EOC labor) in the EVMS cost tool, where DB units <> BL IMS labor DB units.

Y = Number of incomplete WP and PP WBSs (only EOC labor) in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%	1	2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF06_{schedule_resources} FF04_{schedule} FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[O]_DB FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[G]_WBS FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[H]_EOC FF06_{schedule_resources}_[I]_budget_units

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[G]_WBS_type = WP or PP [WBS type]
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB [**incomplete**]
- FF03_{cost}_[E]_EOC = labor [EOC]

Determine X items, a subset of Y, based on the following. [**X**]

Identify FF04_{schedule}_[G]_WBS by EOC,(FF06_{schedule_resources}_[E]_task_ID,FF04_{schedule}_[D]_task_ID) and, if identified, with the following characteristics. [qualifier]

- FF04_{schedule}_[C]_schedule_type = BL, FF06_{schedule_resources}_[C]_schedule_type = BL [sch. type]
- FF06_{schedule_resources}_[H]_EOC = labor [other 1]

Count flagged items based on the following operation(s). [qualifier]

- FF03_{cost}_[O]_DB <> FF06_{schedule_resources}_[I]_budget_units [operation]

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 16, Intent: "Since control account budgets and schedules also establish the constraints required for baseline control, care must be exercised in the establishment of control account budgets to ensure a viable scope/effort correlation and to prevent inadvertent front-loading of the budget baseline."

Page 17, Typical Attribute(s): "The PMB reflects the work scope, time-phased consistent with the integrated master schedule."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 08.01.03 to 08.01.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.01.03**	(08.01.03) (79)	automated/manual verification	monthly

5. Attribute

Scope, Schedule and Budget Alignment

6. Metric Intent

This metric confirms that scope, schedule, and budget align. The metric verifies that 1) the sum of CA values plus the sum of SLPP values plus the UB value equals the PMB; 2) the PMB value plus the MR value equals the CBB value; and 3) the CBB value plus the AUW value equals the value of the project's negotiated cost.

7. Metric Short Description

DB, UB, PMB, MR, CBB, NCC, and AUW not aligned

a

8. Metric

X =
1. PMB + MR <> CBB or
2. NCC + AUW <> CBB.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.2

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[N]_F1_5_b_tot_neg_cost
FF08_{IPMR_F1}	FF07_{IPMR_header}_[O]_F1_5_c_AUW
IPMR F1	FF07_{IPMR_header}_[Y]_F1_6_c_CBB
	FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt
	FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt
	FF08_{IPMR_F1}_[J]_BAC(total)
	FF08_{IPMR_F1}_[N]_rpg_BAC

13. Assumptions

Factor OTB for metric X.2.

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Sum flagged items based on the following operation(s).

qualifier

- FF08_{IPMR_F1}_[J]_BAC(total) + FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt + FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt <> FF07_{IPMR_header}_[Y]_F1_6_c_CBB - FF08_{IPMR_F1}_[N]_rpg_BAC
  OR
  FF07_{IPMR_header}_[N]_F1_5_b_tot_neg_cost + FF07_{IPMR_header}_[O]_F1_5_c_AUW <> FF07_{IPMR_header}_[Y]_F1_6_c_CBB

operation

Conduct the following manual operation(s).

manual

- Manually verify FF data matches project's IPMR F1 report including the header data and if there is an OTB.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 14, Intent: "The Contract Budget Base (CBB) represents the value of all authorized work. This includes the negotiated contract cost (NCC) plus the estimated cost of any authorized unpriced work (AUW). This CBB value forms the basis for program budgeting."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 08.01.04 to 08.01.03.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.02.01**	(08.04.01) (80)	automated	monthly

5. Attribute

Summary Level Planning Packages (SLPP)

6. Metric Intent

This metric confirms that SLPPs established above the CA level identify scope, schedule, and budget. This metric assesses the existence of SLPPs and whether they have scope, schedule, and budget.

7. Metric Short Description

SLPP without scope, schedule, or budget

a

8. Metric

X = Number of SLPP WBS activities in the BL IMS, where
1. Scope is not defined,
2. Schedule (start or finish dates) is not defined in the BL IMS, or
3. Budget (DB) is not defined in the EVMS cost tool.

Y = Number of SLPP WBS activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		0.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF03_{cost}	FF01_{WBS}_[C]_WBS
FF04_{schedule}	FF04_{schedule}	FF01_{WBS}_[G]_WBS_type
FF06_{schedule_resources}	FF13_{WAD}	FF03_{cost}_[D]_WBS
		FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[K]_DB
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[L]_ES_date
		FF04_{schedule}_[M]_EF_date
		FF06_{schedule_resources}_[H]_EOC
		FF13_{WAD}_[C]_WBS
		FF13_{WAD}_[L]_scope

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

qualifier

- FF01_{WBS}_[G]_WBS_type = SLPP — WBS type
- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- FF04_{schedule}_[E]_task_type <> M or SVT or ZBA or SM or S — task type

Determine X items, a subset of Y, based on the following.

X

Identify FF03_{cost}_[D]_WBS,FF04_{schedule}_[G]_WBS,FF13_{WAD}_[C]_WBS and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

operation

- FF13_{WAD}_[L]_scope = null
  OR
  FF04_{schedule}_[L]_ES_date = null
  OR
  FF04_{schedule}_[M]_EF_date = null
  OR
  FF03_{cost}_[K]_DB = 0/null

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 14, Intent: "...Budget for far-term efforts may be held in higher level accounts until an appropriate time for allocation at the control account level."

Page 15, Intent: "...budget distribution is typically accomplished through the establishment of time-phased resources within control accounts. For future effort that cannot practically be identified to a control account, it is permissible to establish a temporary summary level planning"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Section 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.03.01**	(09.01.01) (81)	automated/manual verification	quarterly

5. Attribute

Work Authorization Documents (WAD)

6. Metric Intent

This metric confirms that WADs identify scope of work, budget by EOC, and POP. This metric ensures that each WAD (at the CA at a minimum) has scope articulated in the WBS dictionary, a dollarized budget value by EOC listed with the cost system, and a specified POP consistent with the BL IMS.

7. Metric Short Description

WAD without scope, schedule, or budget by EOC

a

8. Metric

X = Number of incomplete (based on the BL IMS) CA WADs, where
1. Scope is not defined in the WAD or not consistent with the WBS dictionary,
2. POP (start or finish dates) is not defined in the WAD or consistent with the BL IMS, or
3. Budget (DB) by EOC is not defined in the WAD or consistent with the EVMS cost tool.

Y = Number of incomplete (based on the BL IMS) CA WADs.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF13_{WAD}	FF03_{cost}	FF01_{WBS}_[C]_WBS
FF04_{schedule}	FF04_{schedule}	FF01_{WBS}_[J]_WBS_narrative
FF06_{schedule_resources}	WADs	FF03_{cost}_[D]_WBS
	FF22_{WBS_dictionary}	FF03_{cost}_[K]_DB
	FF01_{WBS}	FF04_{schedule}_[B]_CPP_status_date
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[L]_ES_date
		FF04_{schedule}_[M]_EF_date
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF06_{schedule_resources}_[H]_EOC
		FF13_{WAD}_[C]_WBS
		FF13_{WAD}_[H]_budget_dollars
		FF13_{WAD}_[J]_POP_start_date
		FF13_{WAD}_[K]_POP_finish_date
		FF13_{WAD}_[L]_scope

13. Assumptions

Must be at the CA level.
Start and finish dates compared against WAD.

14. Instructions

Determine Y items based on the following.

Y

Count FF13_{WAD}_[C]_WBS items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- FF04_{schedule}_[E]_task_type <> SVT or ZBA or SM or S — task type
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC — **incomplete**
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

Determine X items, a subset of Y, based on the following.

X

Identify FF13_{WAD}_[C]_WBS,FF03_{cost}_[D]_WBS,FF04_{schedule}_[G]_WBS,FF01_{WBS}_[C]_WBS and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type

Count flagged items based on the following operation(s). qualifier

operation

- FF13_{WAD}_[L]_scope <> FF01_{WBS}_[J]_WBS_narrative
  OR
  FF13_{WAD}_[J]_POP_start_date >= FF04_{schedule}_[L]_ES_date
  OR
  FF13_{WAD}_[K]_POP_finish_date <= FF04_{schedule}_[M]_EF_date
  OR
  FF13_{WAD}_[H]_budget_dollars = 0/null
  OR
  FF13_{WAD}_[H]_budget_dollar <> FF03_{cost}_[K]_DB

Conduct the following manual operation(s). **manual**

operation

- 1. Scope is not defined in the WAD or not consistent with the WBS dictionary,
  2. POP (start or finish dates) is not defined in the WAD or consistent with the BL IMS, or
  3. Budget (DB) by EOC is not defined in the WAD or consistent with the EVMS cost tool.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 18, Intent: "Through a work authorization process, establish budgets for all authorized work to be done by the responsible organizational elements. No work should begin before the effort is authorized by an initial work authorization. As budgets and schedules are established and approved for all the authorized work at the control account level, the work authorization is updated as required. The work authorization at the control account level is where the approved work scope, period of performance, and budget are integrated. The control accounts identify the appropriate cost elements (labor, subcontract, material, and other direct costs). It is important to include all resources required to accomplish the work scope."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Section 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.04.01**	(09.02.01) (82)	automated	monthly

5. Attribute

Work Authorization Prior to Performance

6. Metric Intent

This metric confirms that work scope, schedule, and budget are simultaneously authorized prior to the execution of the work scope and actual costs being incurred. This metric identifies the number of CAs where work started prior to the latest approved WAD and the count of differences between the WAD approval signature date and recorded ACWP for CAs.

7. Metric Short Description

CA started prior WAD approved

a

8. Metric

X = Number of CA WBSs in the WBS dictionary, where
1. Actual start in the FC IMS < WAD approval date,
2. Actual start in the FC IMS < POP start date,
3. Actual cost in the EVMS cost tool < WAD approval date, or
4. Actual cost in the EVMS cost tool < POP start date.

Y = Number of CAs in the WBS dictionary.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS}	FF13_{WAD} FF03_{cost} FF04_{schedule}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[D]_WBS FF03_{cost}_[M]_inc_ACWP_dollars FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[T]_AS_date FF13_{WAD}_[C]_WBS FF13_{WAD}_[F]_auth_date FF13_{WAD}_[J]_POP_start_date

13. Assumptions

Limited to CAs.

14. Instructions

Determine Y items based on the following.

Count FF01_WBS_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA

Determine X items, a subset of Y, based on the following.

Identify FF13_{WAD}_[C]_WBS,FF03_{cost}_[D]_WBS,FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- FF04_{schedule}_[E]_task_type <> SVT or ZBA or S

Count flagged items based on the following operation(s).

- FF04_{schedule}_[T]_AS_date < FF13_{WAD}_[F]_auth_date
  OR
  FF04_{schedule}_[T]_AS_date < FF13_{WAD}_[J]_POP_start_date
  OR
  FF03_{cost}_[B]_CPP_status_date where earliest FF03_{cost}_[M]_inc_ACWP_dollars <> 0/null < FF13_{WAD}_[F]_auth_date
  OR
  FF03_{cost}_[B]_CPP_status_date where earliest FF03_{cost}_[M]_inc_ACWP_dollars <> 0/null < FF13_{WAD}_[J]_POP_start_date] [period]

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
X
qualifier
sch. type
other 2
qualifier
operation

15. Reference(s)

Page 18, Intent: "No work should begin before the effort is authorized by an initial work authorization. As budgets and schedules are established and approved for all the authorized work at the control account level, the work authorization is updated as required."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.05.01**	(09.03.01) (83)	automated	monthly

5. Attribute

Budgeting by Elements of Cost (EOC)

6. Metric Intent

This metric identifies the count of incomplete SLPPs/CAs/WPs/PPs by EOC with DB <= 0.

7. Metric Short Description

CA/WP/PP/SLPP by EOC DB <= 0

a A

8. Metric

X = Number of incomplete WP and PP WBSs by EOC in the EVMS cost tool, where DB <= 0.

Y = Number of incomplete WP and PP WBSs by EOC in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} FF01_{WBS}	FF03_{cost}	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC,FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

qualifier

- FF01_{WBS}_[G]_WBS_type = WP or PP

WBS type

- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF03_{cost}_[K]_DB <= 0 or null

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 18, Intent: "The control accounts identify the appropriate cost elements (labor, subcontract, material, and other direct costs). It is important to include all resources required to accomplish the work scope."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 10, 12, and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.05.02**	(09.03.02) (84)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Budgeting by Elements of Cost (EOC)

6. Metric Intent

This metric confirms that CA budgets are segregated and planned by EOC. This metric identifies the count of incomplete CAs without a BAC dollar value by EOC.

7. Metric Short Description

CA by EOC not reasonable

8. Metric

X = Number of CA WBSs by EOC in the EVMS cost tool, not reasonably planned to execute its scope.

Y = Number of CA WBSs by EOC in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} FF01_{WBS}	schedule and cost documents	FF01_{WBS}_[C]_WBS FF01_{WBS}_[D]_title FF01_{WBS}_[G]_WBS_type FF01_{WBS}_[J]_WBS_narrative FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[K]_DB

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC,FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = CA
- FF01_{WBS}_[D]_title <listing>
- FF01_{WBS}_[J]_WBS_narrative <listing>
- FF03_{cost}_[K]_DB <listing>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- CA WBSs by EOC in the EVMS cost tool are not reasonably planned to execute its scope.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
other 1
other 2
other 3
X
qualifier
operation

15. Reference(s)

Page 18, Intent: "The control accounts identify the appropriate cost elements (labor, subcontract, material, and other direct costs). It is important to include all resources required to accomplish the work scope."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.06.01**	(10.01.01) (85)	automated	monthly

5. Attribute

Work Package Planning, Distinguishability, and Duration

6. Metric Intent

This metric confirms that discrete WPs are relatively short in duration and they have objective interim measures or milestones, such as points of technical achievement to minimize the subjectivity of the in-process evaluation of performance assessment. This metric ensures that incomplete discrete WPs do not have a BL duration > 132 work days.

7. Metric Short Description

discrete WP > 132 work days [a]

8. Metric

X = Number of incomplete discrete WP WBSs (excludes SVTs) in the BL IMS, with a duration (finish date - start date) > 132 work days.

Y = Number of incomplete discrete WP WBSs (excludes SVTs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		1.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF01_{WBS}	FF04_{schedule}	FF01_{WBS}_[G]_WBS_type FF03_{cost}_[G]_WBS_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

Schedule tool calendar is 5 day work week.

14. Instructions

Determine Y items based on the following. [Y]

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = WP [qualifier WBS type]
- FF04_{schedule}_[C]_schedule_type = BL [sch. type]
- FF04_{schedule}_[E]_task_type <> SVT [task type]
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC [incomplete]
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method <> A or J or K or NA [EVT]

Determine X items, a subset of Y, based on the following. [X]

Identify FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics. [qualifier]

Count flagged items based on the following operation(s). [qualifier]

- FF04_{schedule}_[M]_EF_date (earliest) - FF04_{schedule}_[L]_ES_date (latest) > 132 work days [operation]

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 20, Intent: "When work packages are relatively short, little or no assessment of work-in-progress is required. As work package length increases, work-in-progress measurement becomes more subjective, unless objective techniques, such as discrete milestones with preassigned budget values or completion percentages, subdivide them. A key feature, from the standpoint of evaluating accomplishment, is

the desirability of having work packages that incorporate frequent, objective indicators of progress."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.07.01**	(10.02.02) (86)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Measurable Units and Budget Substantiation

6. Metric Intent

This metric confirms that future work scope which cannot be planned in detail is subdivided to the extent practicable for budgeting and scheduling purposes. This metric identifies the count of occurrences where the CAM cannot substantiate the work associated with their PPs, and adequately explain why the schedule and budget allocations are reasonable and achievable.

7. Metric Short Description

PP activities unsubstantiated

8. Metric

X = Number of PP WBS activities in the BL IMS, where CAM cannot substantiate reasonable work, schedule, or budget.

Y = Number of PP WBS activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost} FF01_{WBS}	schedule and cost documents scope documents (e.g., contract, PEP, PMP, conceptual design report,…)	FF01_{WBS}_[C]_WBS FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[G]_WBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[G]_WBS,FF01_{WBS}_[C]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = PP
- FF04_{schedule}_[C]_schedule_type = BL

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Work associated with PPs including shedule and budget allocations are not reasonable and achievable.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
sch. type

X
qualifier
operation

15. Reference(s)

Page 20, Management Value: "The master schedule may have more detail below the work package/planning package level to support the development of a realistic critical path, as applicable."

Page 21, Intent: "Time-phased budgets assigned to planning packages must be supported by a specified scope of work and this relationship must be maintained when detailed planning of the effort occurs."

Page 21, Typical Attribute(s): "Planning package plans must reflect the manner in which the work is to be performed."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.07.02**	(10.07.01) (87)	automated	monthly

5. Attribute

Measurable Units and Budget Substantiation

6. Metric Intent

This metric ensures PPs do not have an actual start date, ACWP, or BCWP.

7. Metric Short Description

PP with actual start, ACWP, or BCWP

a A

8. Metric

X = Number of PP WBSs in the FC IMS, with an actual start date, ACWP, or BCWP.

Y = Number of PP WBSs in the FC IMS and EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF03_{cost}_[D]_WBS
FF03_{cost}	FF03_{cost}	FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[L]_BCWPc
		FF03_{cost}_[M]_ACWPc
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID,(FF04_{schedule}_[G]_WBS,FF03_{cost}_[D]_WBS) items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = PP
- FF04_{schedule}_[C]_schedule_type = FC

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[G]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[T]_AS_date <> null
  OR
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date <> null
  OR
  FF03_{cost}_[M]_ACWPc <> 0
  OR
  FF03_{cost}_[L]_BCWPc <> 0

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
sch. type
X
qualifier
qualifier
operation

15. Reference(s)

Page 21, Intent: "Work for a given control account that cannot be planned in detail at the outset will be divided into larger segments and placed into planning packages within the control account. Planning packages are aggregates of future tasks and budgets, beyond those planned in detail that will be divided into work packages at the earliest practical time."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.07.04**	(10.08.01) (88)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Measurable Units and Budget Substantiation

6. Metric Intent

This metric confirms that WP and PP budgets are substantiated.

7. Metric Short Description

WBS BOE unsubstantiated

8. Metric

X = Number of incomplete WP and PP WBSs on the longest path (sample size) in the BL IMS, where the CAM cannot substantiate BOE including if the budget is adequate to perform the work when the BL IMS was established.

Y = Number of incomplete WP and PP WBSs on the longest path (sample size) in the BL IMS.
Sample size of 5 WP and 3 PP WBSs.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost}	BOE data presented by CAM	FF01_{cost}_[G]_WBS_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

- FF01_{WBS}_[G]_WBS_type = WP or PP
- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[AB]_is_critical = yes

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- CAM cannot substantiate BOE including if the budget is adequate to perform the work when the BL IMS was established for WPs and PPs in the BL IMS (sample size 5 WPs and 3 PPs) that are incomplete and on the longest path.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
sch. type
incomplete
other 2
X
qualifier
operation

15. Reference(s)

Page 20, Intent: "Each work package will have the following characteristics:
It has a budget or assigned value expressed in terms of dollars, labor hours, or measurable units that is substantiated by supporting project plans."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.07.05**	(11.01.01) (89)	automated	quarterly

5. Attribute

Measurable Units and Budget Substantiation

6. Metric Intent

This metric confirms that the sum of all WP budgets plus PP budgets equal the total CA budget value. This metric identifies the count of differences for incomplete CAs between the sum of WP budgets plus PP budgets and the WAD budget value for the CAs.

7. Metric Short Description

CA DB <> WAD budget [a]

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where EVMS cost tool DB <> WAD budget.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF13_{WAD}	FF03_{cost}_[D]_WBS
	FF03_{cost}	FF03_{cost}_[G]_WBS_type
		FF03_{cost}_[K]_DB
		FF03_{cost}_[L]_BCWPc
		FF13_{WAD}_[C]_WBS
		FF13_{WAD}_[H]_budget_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics. qualifier

- FF03_{cost}_[G]_WBS_type = CA WBS type
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB **incomplete**

Determine X items, a subset of Y, based on the following. [X]

Identify FF13_{WAD}_[C]_WBS and, if identified, with the following characteristics. qualifier

Count flagged items based on the following operation(s). qualifier

- FF03_{cost}_[K]_DB <> FF13_{WAD}_[H]_budget_dollars operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 22, Management Value: "The integrity of the performance measurement baseline requires that the budget of the control account equal the sum of its work package and planning package budgets. When the budget of the control account equals the sum of its work package and planning package budgets, it prevents duplicate recording of budgets."

Page 22, Intent: "In all cases, the value of the budget assigned to individual work packages and planning packages within the control account must sum to the total value authorized for the control account."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.08.01**	(10.04.01) (90)	automated	monthly

5. Attribute

Appropriate Assignment of Earned Value Techniques (EVT)

6. Metric Intent

This metric confirms that a single EVT (discrete, LOE, or apportioned) is assigned to each incomplete WP.

7. Metric Short Description

WP with EVT LOE and non-LOE

a A

8. Metric

X = Number of incomplete WPs in the BL IMS (only activities), with both discrete and EVT LOE activities.

Y = Number of incomplete WPs in the BL IMS (only activities).

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost}	FF04_{schedule}	FF03_{cost}_[G]_WBS_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[G]_WBS items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = WP

WBS type

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[E]_task_type = A

task type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

Count flagged items based on the following operation(s).

qualifier

operation

- (FF04_{schedule}_[K]_EV_method = LOE
  AND
  FF04_{schedule}_[K]_EV_method <> LOE)
  OR
  (FF04_{schedule}_[K]_EV_method = LOE
  AND
  FF04_{schedule}_[K]_EV_method = apportioned)
  OR
  (FF04_{schedule}_[K]_EV_method = discrete
  AND
  FF04_{schedule}_[K]_EV_method = apportioned)

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 21, Typical Attribute(s): "Have duration limited to a relatively short span of time, or are subdivided by discrete value milestones to facilitate the objective measurement techniques of work performed, or are LOE work packages integrated with detailed engineering, manufacturing, or other schedules."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.08.02**	(10.06.01) (91)	automated	monthly

5. Attribute

Appropriate Assignment of Earned Value Techniques (EVT)

6. Metric Intent

This test confirms that the activity (where performance is taken) EVT is consistent with the manner in which the resource budgets (for all elements of cost) are planned to be performed and progress measured. This metric ensures the number of incomplete discrete activities with EVT of 0-100 does not have a duration that exceeds 22 work days.

7. Metric Short Description

0-100 > 22 work days

a A

8. Metric

X = Number of incomplete EVT 0-100 activities in the BL IMS, where duration is > 22 work days.

Y = Number of incomplete EVT 0-100 activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[W]_orig_duration

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method = 0-100

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[W]_orig_duration > 22 working days

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 20, Management Value: "Budgets, established at the work package level identifying specific resource requirements in dollars, hours, or other measurable units, provide the detail for effective execution of the baseline plan. The resources are to be time-phased the way the detail work is to be accomplished. This approach provides meaningful product-related or management-oriented events for performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.08.03**	(10.06.02) (92)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Appropriate Assignment of Earned Value Techniques (EVT)

6. Metric Intent

This metric looks to determine whether the QBD EVT used to derive the time-phased BCWS is consistent with how the work scope will be performed.

7. Metric Short Description

schedule or cost time-phased resources <> QBD time-phased resources

I H

8. Metric

X = Number of incomplete activities with original duration > 44 work days in the BL IMS, where the time-phased resources in the BL IMS as well as the EVMS cost tool do not align with the time-phased QBD.

Y = Number of incomplete activities with original duration > 44 work days in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	QBD FF04_{schedule} FF03_{cost} schedule and cost documents	FF04_{schedule}_[D]_task_ID FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[W]_orig_duration

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y
qualifier
sch. type
incomplete

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method <> A or J or K or NA
- FF04_{schedule}_[W]_orig_duration > 44 working days

EVT
other 1

Determine X items, a subset of Y, based on the following.

X
qualifier
operation

Manually count flagged items based on the following operation(s).

- Time-phased resources in the BL IMS as well as the EVMS cost tool do not align with the time-phased QBD.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 20, Management Value: "Budgets, established at the work package level identifying specific resource requirements in dollars, hours, or other measurable units, provide the detail for effective execution of the baseline plan. The resources are to be time-phased the way the detail work is to be accomplished. This approach provides meaningful product-related or management-oriented events for performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.08.04**	(10.06.03) (93)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Appropriate Assignment of Earned Value Techniques (EVT)

6. Metric Intent

This metric confirms that the WP or activity EVT where performance measurement is planned and taken are consistent with the manner in which the budgets for all elements of cost are planned and scheduled to be performed and measured. This evaluation is accomplished with objective indicators that reflect technical accomplishment in the BCWP for all discrete work consistent with progress achieved towards each of the goals of the project's key events, decision points, and milestones. This metric identifies work scope listed with an apportioned EVT in the BL IMS and cost system to determine the adequacy of apportioned EVT selection using the technical explanations provided by CAMs during discussions.

7. Metric Short Description

apportioned unsubstantiated

I

8. Metric

X = Number of incomplete EVT apportioned activities in the BL IMS, with inadequate justification for EVT apportioned.

Y = Number of incomplete EVT apportioned activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF01_{WBS}	FF04_{schedule} FF03_{cost} documentation for basis of apportioned activities (identifies base and calculations)	FF01_{WBS}_[C]_WBS FF01_{WBS}_[G]_WBS_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[G]_WBS FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AH]_justification_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID,(F01_{WBS}_[C]_WBS,FF04_{schedule}_[G]_WBS) items and, if identified, with the following characteristics.

qualifier

- FF01_{WBS}_[G]_WBS_type = WP

WBS type

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method = apportioned

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- FF04_{schedule}_[AH]_justification_narrative <listing>

other 1

Manually count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[AH]_justification_narrative for apportioned effort relationships are not documented, logical, and demonstratable.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 20, Management Value: "Budgets, established at the work package level identifying specific resource requirements in dollars, hours, or other measurable units, provide the detail for effective execution of the baseline plan. The resources are to be time-phased the way the detail work is to be accomplished."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.08.05**	(10.06.04) (94)	automated	monthly

5. Attribute

Appropriate Assignment of Earned Value Techniques (EVT)

6. Metric Intent

This metric confirms that an activity (where performance is taken) EVT is consistent with the manner in which the resource budgets (all elements of cost) are planned to be performed and progress measured. This metric ensures the number of incomplete discrete activities with EVT of 50-50 does not have a duration that exceeds 44 work days.

7. Metric Short Description

50-50 > 44 work days

a A

8. Metric

X = Number of incomplete EVT 50-50 activities in the BL IMS, where duration is > 44 work days.

Y = Number of incomplete EVT 50-50 activities in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[W]_orig_duration

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method = 50-50

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[W]_orig_duration > 44 work days

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
incomplete
EVT
X
qualifier
qualifier
operation

15. Reference(s)

Page 20, Management Value: "Budgets, established at the work package level identifying specific resource requirements in dollars, hours, or other measurable units, provide the detail for effective execution of the baseline plan. The resources are to be time-phased the way the detail work is to be accomplished. This approach provides meaningful product-related or management-oriented events for performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.09.01**	(12.02.01) (95)	automated	monthly

5. Attribute

Identify and Control Level of Effort (LOE) Work Scope

6. Metric Intent

This metric confirms that co-mingling of LOE and discrete effort within a CA is minimized. This metric ensures that incomplete CAs having LOE BAC of between 15% and 80% do not have CPI for discrete effort >= 10 basis points different from the CPI for LOE effort.

7. Metric Short Description

CA CPI delta discrete and LOE >= 0.1

a A

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where
1. EVT LOE CA DB is between 15% and 80% of total CA DB, and
2. absolute difference between CPIc of EVT discrete and EVT LOE is >= 0.1.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[K]_DB (where FF03_{cost}_[J]_EV_method = LOE) / FF03_{cost}_[K]_DB > 15%
- FF03_{cost}_[K]_DB (where FF03_{cost}_[J]_EV_method = LOE) / FF03_{cost}_[K]_DB < 80%

X
qualifier
other 1
other 2

Count flagged items based on the following operation(s).

- abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc (where FF03_{cost}_[J]_EV_method <> LOE) - FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc (where FF03_{cost}_[J]_EV_method = LOE)) >= 0.10

qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 23, Typical Attribute(s): "Level of effort work packages contain tasks of a general or supportive nature that do not produce definite end products, must be separately evaluated from discrete work packages within the control account..."

Page 23, Typical Attribute(s): "If level of effort and discrete work packages are ever mixed within the same control account, the control account manager must ensure visibility into the earned value technique for measuring performance of the discrete effort portion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.09.02**	(12.02.02) (96)	automated	monthly

5. Attribute

Identify and Control Level of Effort (LOE) Work Scope

6. Metric Intent

This metric confirms that co-mingling of LOE and discrete effort within a CA is minimized. This metric ensures that incomplete CAs having LOE BAC of between 15% and 80% do not have CPI for discrete effort >= 10 basis points different from the SPI for LOE effort.

7. Metric Short Description

CA SPI delta discrete and LOE >= 0.1

a A

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where
1. EVT LOE CA DB is between 15% and 80% of total CA DB, and
2. absolute difference between SPIc of EVT discrete and EVT LOE is >= 0.1.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_BCWSc FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[K]_DB (where FF03_{cost}_[J]_EV_method = LOE) / FF03_{cost}_[K]_DB > 15%
- FF03_{cost}_[K]_DB (where FF03_{cost}_[J]_EV_method = LOE) / FF03_{cost}_[K]_DB < 80%

X
qualifier
other 1
other 2

Count flagged items based on the following operation(s).

- abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[K]_BCWSc (where FF03_{cost}_[J]_EV_method <> LOE) - FF03_{cost}_[L]_BCWPc / FF03_{cost}_[K]_BCWSc (where FF03_{cost}_[J]_EV_method = LOE)) >= 0.10

qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 23, Typical Attribute(s): "Level of effort work packages contain tasks of a general or supportive nature that do not produce definite end products, must be separately evaluated from discrete work packages within the control account..."

Page 23, Typical Attributes: "If level of effort and discrete work packages are ever mixed within the same control account, the control account manager must ensure visibility into the earned value technique for measuring performance of the discrete effort portion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.09.03**	(12.03.01) (97)	automated/manual	monthly

5. Attribute

Identify and Control Level of Effort (LOE) Work Scope

6. Metric Intent

This metric confirms that the amount of LOE in the BL plan is substantiated and is limited. This metric identifies the count of LOE activities not meeting criteria based on the nature of the work and/or discussed in the contractor's SD.

7. Metric Short Description

LOE unsubstantiated

I

8. Metric

X = Number of incomplete activities (only EVT LOEs) in the BL IMS, where work associated with EVT LOE does not meet criteria in the SD.

Y = Number of incomplete activities (only EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	schedule and cost documents SD	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[G]_WBS FF04_{schedule}_[I]_task_description FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method = LOE

EVT

Determine X items, a subset of Y, based on the following.

X

Manually count flagged items based on the following operation(s).

qualifier

- Work associated with EVT LOE does not meet the criteria in the contractor's SD and template.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 23, Intent: "Each task on the project needs to be assessed to determine the best method to budget and measure its progress toward completion. Level of effort is defined as having no measurable output or product that can be discretely planned at the work package level. Level of effort must be limited to those activities that are unable to be measured discretely to avoid distorting project performance data."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.09.04**	(12.01.01) (98)	automated	monthly

5. Attribute

Identify and Control Level of Effort (LOE) Work Scope

6. Metric Intent

This metric identifies the count of BL IMS incomplete LOE activities on the longest path or driving paths.

7. Metric Short Description

BL IMS, LOE on longest path

a A

8. Metric

X = Number of incomplete activities (only EVT LOEs) in the BL IMS, and on the longest path.

Y = Number of incomplete activities (only EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost}	FF04[G]_WBS	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date
- FF04_{schedule}_[K]_EV_method = LOE

Y
qualifier
sch. type
incomplete
EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AB]_is_critical = yes

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 23, Intent: "Level of effort work packages contain tasks of a general or supportive nature that do not produce definite end products, must be separately evaluated from discrete work packages within the control account, and contain time-phased budgets for planning and control."

PASEG, Page 66: "If LOE tasking is included in the IMS it should be separately identifiable and not affect the critical path."

PASEG, Page 134: "...The path does not contain level-of-effort (LOE) or summary activities…"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.09.05**	(12.01.02) (99)	automated	monthly

5. Attribute

Identify and Control Level of Effort (LOE) Work Scope

6. Metric Intent

This metric identifies the count of FC IMS incomplete LOE activities on the longest path or driving paths.

7. Metric Short Description

FC IMS, LOE on longest pathff

a A

8. Metric

X = Number of incomplete activities (only EVT LOEs) in the FC IMS, and on the longest path.

Y = Number of incomplete activities (only EVT LOEs) in the FC IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AB]_is_critical

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
- FF04_{schedule}_[K]_EV_method = LOE

Y

qualifier

sch. type

incomplete

EVT

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AB]_is_critical = yes

X

qualifier

qualifier

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 23, Intent: "Level of effort work packages contain tasks of a general or supportive nature that do not produce definite end products, must be separately evaluated from discrete work packages within the control account, and contain time-phased budgets for planning and control."

PASEG, Page 66: "If LOE tasking is included in the IMS it should be separately identifiable and not affect the critical path."

PASEG, Page 134: "...The path does not contain level-of-effort (LOE) or summary activities…"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.10.01**	(14.01.01) (100)	automated	monthly

5. Attribute

Identify Management Reserve (MR) Budget

6. Metric Intent

This metric confirms that MR is held outside the PMB. This metric ensures the project TAB dollar value less the PMB dollar value less the MR dollar value = $0.

7. Metric Short Description

TAB - PMB - MR <> 0

a A

8. Metric

X = TAB - PMB - MR <> 0.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.7

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}_[K]_DB
FF07_{IPMR_header}	FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt
	FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt
	FF07_{IPMR_header}_[AI]_F3_5_f_TAB

13. Assumptions

TAB = CBB + overrun

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Sum flagged items based on the following operation(s).

qualifier

- FF07_{IPMR_header}_[AI]_F3_5_f_TAB - FF03_{cost}_[K]_DB - FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt - FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt <> 0

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 26, Intent: "Because management reserve is budget that is not yet tied to work, it does not form part of the performance measurement baseline."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.11.02**	(14.03.01) (101)	automated	initially & semi-annually to align with horizon planning increments

5. Attribute

Undistributed Budget (UB)

6. Metric Intent

This metric confirms that UB is part of the PMB and has defined scope traceable, controlled, and limited to authorized effort which cannot yet be distributed. This metric identifies the count of differences between the PMB budget value listed on the IPMR F1 and the PMB log budget value for the same period.

7. Metric Short Description

DB, change control log <> IPMR F1

8. Metric

X = Last 6 months of DB in the change control log, where change control log DB <> IPMR F1 DB.

Y = Last 6 months of DB in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} CPP-5_FF03_{cost}	FF03_{cost} FF12_{CC_log_detail}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[K]_DB FF12_{CC_log_detail}_[B]_CPP_status_date FF12_{CC_log_detail}_[F]_trn_category FF12_{CC_log_detail}_[I]_credit_dollars_cum FF12_{CC_log_detail}_[K]_debit_dollars_cum CPP-5_FF03_{cost}_[B]_CPP_status_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[B]_CPP_status_date items and, if identified, with the following characteristics.

- FF03_{cost}_[B]_CPP_status_date > CPP-5_FF03_{cost}_[B]_CPP_status_date

Y
qualifier
other 1

Determine X items, a subset of Y, based on the following.

Identify FF12_{CC_log_detail}_[B]_CPP_status_date and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = DB

Count flagged items based on the following operation(s).

- FF03_{cost}_[K]_DB <> FF12_{CC_log_detail}_[I]_credit_dollars_cum + FF12_{CC_log_detail}_[K]_debit_dollars_cum

X
qualifier
other 1
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 26, Management Value: "To ensure that budget for newly authorized efforts remains tied to the associated scope during the initial planning process, Undistributed Budget (UB) has been designated as the short-term holding account. Once the responsible organization(s) has been identified, the budget will transfer from undistributed budget to the appropriate control account(s)."

Page 26, Intent: "Undistributed budget is budget that is applicable to specific project effort, but has not yet been distributed below the project level either directly to control accounts or to summary level planning packages. It is a transient amount because, once it is distributed to either control accounts or to summary level planning packages, it ceases to be undistributed budget. Because undistributed budget is budget that is tied to work, it does form part of the performance measurement baseline. Undistributed budget accounts are to be cleared in a reasonably timely manner as work scope is finalized and distributed to control accounts or to summary level planning packages."

Page 26, Typical Attribute(s): "Program control logs including:
• Undistributed budget (showing month end values; monthly sources and applications to control accounts; current value)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.11.03**	(14.03.02) (102)	automated	initially & semi-annually to align with horizon planning increments

5. Attribute

Undistributed Budget (UB)

6. Metric Intent

This metric confirms that UB is part of the PMB and has defined scope traceable, controlled, and limited to authorized effort which cannot yet be distributed. This metric identifies the count of differences between the UB budget value listed on the IPMR F1 and the UB log budget value for the same period.

7. Metric Short Description

UB, change control log <> IPMR F1

8. Metric

X = Last 6 months of UB in the change control log, where change control log UB <> IPMR F1 UB.

Y = Last 6 months of UB in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF07_{IPMR_header} CPP-5_FF07_{IPMR_header}	FF07_{IPMR_header} FF12_{CC_log_detail}	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt FF12_{CC_log_detail}_[B]_CPP_status_date FF12_{CC_log_detail}_[F]_trn_category FF12_{CC_log_detail}_[I]_credit_dollars_cum FF12_{CC_log_detail}_[K]_debit_dollars_cum CPP-5_FF07_{IPMR_header}_[B]_CPP_status_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF07_{IPMR_header}_[B]_CPP_status_date items and, if identified, with the following characteristics.

- FF07_{IPMR_header}_[B]_CPP_status_date > CPP-5_FF07_{IPMR_header}_[B]_CPP_status_date

Y
qualifier
other 1

Determine X items, a subset of Y, based on the following.

Identify FF12_{CC_log_detail}_[B]_CPP_status_date and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = UB

Count flagged items based on the following operation(s).

- FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt <> FF12_{CC_log_detail}_[I]_credit_dollars_cum + FF12_{CC_log_detail}_[K]_debit_dollars_cum

X
qualifier
other 1
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 26, Management Value: "To ensure that budget for newly authorized efforts remains tied to the associated scope during the initial planning process, Undistributed Budget (UB) has been designated as the short-term holding account. Once the responsible organization(s) has been identified, the budget will transfer from undistributed budget to the appropriate control account(s)."

Page 26, Intent: "Undistributed budget is budget that is applicable to specific project effort, but has not yet been distributed below the project level either directly to control accounts or to summary level planning packages. It is a transient amount because, once it is distributed to either control accounts or to summary level planning packages, it ceases to be undistributed budget. Because undistributed budget is budget that is tied to work, it does form part of the performance measurement baseline. Undistributed budget accounts are to be cleared in a reasonably timely manner as work scope is finalized and distributed to control accounts or to summary level planning packages."

Page 26, Typical Attribute(s): "Program control logs including:
• Undistributed budget (showing month end values; monthly sources and applications to control accounts; current value)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.12.01**	(14.03.03) (103)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Reconcile to Target Cost Goal

6. Metric Intent

This metric confirms that UB is part of the PMB and has defined scope traceable, controlled, and limited to authorized effort which cannot yet be distributed. This metric verifies that AUW budget value is deducted from the UB budget value and tracked by change.

7. Metric Short Description

AUW unsubstantiated

8. Metric

X =
1. AUW value is not supported with DOE documentation or does not align with the CBB log,
2. AUW authorization by DOE is not based on full scope or is limited to including by NTE or funding constraints,
3. AUW, MR, UB, and DB are not distributed via change control process, or
4. AUW, MR, UB, and DB values in the IPMR F1 do not align with the CBB log.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

X artifact(s)
IPMR F1
CBB log

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- 1. AUW value is not supported with DOE documentation or does not align with the CBB log,
  2. AUW authorization by DOE is not based on full scope or is limited to including by NTE or funding constraints,
  3. AUW, MR, UB, and DB are not distributed via change control process, or
  4. AUW, MR, UB, and DB values in the IPMR F1 do not align with the CBB log.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 26, Management Value: "To ensure that budget for newly authorized efforts remains tied to the associated scope during the initial planning process, Undistributed Budget (UB) has been designated as the short-term holding account. Once the responsible organization(s) has been identified, the budget will transfer from undistributed budget to the appropriate control account(s)."

Page 26, Intent: "Undistributed budget is budget that is applicable to specific project effort, but has not yet been distributed below the project level either directly to control accounts or to summary level planning packages. It is a transient amount because, once it is distributed to either control accounts or to summary level planning packages, it ceases to be undistributed budget. Because undistributed budget is budget that is tied to work, it does form part of the performance measurement baseline. Undistributed budget accounts are to be cleared in a reasonably timely manner as work scope is finalized and distributed to control accounts or to summary level planning packages."

Page 26, Typical Attribute(s): "Program control logs including:
• Undistributed budget (showing month end values; monthly sources and applications to control accounts; current value)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
C	**C.12.02**	(15.01.01) (104)	automated	monthly

5. Attribute

Reconcile to Target Cost Goal

6. Metric Intent

This metric confirms that there is a reconciliation of the TAB.

7. Metric Short Description

NCC + AUW + OTB overrun <> PMB + MR

a

8. Metric

X = NCC + AUW + OTB overrun <> PMB + MR.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.3

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}_[B]_CPP_status_date
FF07_{IPMR_header}	FF03_{cost}_[K]_DB
FF08_{IPMR_F1}	FF07_{IPMR_header}_[B]_CPP_status_date
	FF07_{IPMR_header}_[N]_F1_5_b_tot_neg_cost
	FF07_{IPMR_header}_[O]_F1_5_c_AUW
	FF07_{IPMR_header}_[Y]_F1_6_c_CBB
	FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt
	FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt
	FF07_{IPMR_header}_[AI]_F3_5_f_TAB
	FF08_{IPMR_F1}_[B]_CPP_status_date
	FF08_{IPMR_F1}_[N]_RPG_BAC

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Identify FF03_{cost}_[B]_CPP_status_date
FF07_{IPMR_header}_[B]_CPP_status_date
FF08_{IPMR_F1}_[B]_CPP_status_date and, if identified, with the following characteristics.

qualifier

Sum flagged items based on the following operation(s).

qualifier

- abs(- FF07_{IPMR_header}_[N]_F1_5_b_tot_neg_cost - FF07_{IPMR_header}_[O]_F1_5_c_AUW - FF08_{IPMR_F1}_[N]_RPG_BAC + FF03_{cost}_[K]_DB + FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt + FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt) <> 0
  OR
  abs(FF07_{IPMR_header}_[AI]_F3_5_f_TAB - FF07_{IPMR_header}_[N]_F1_5_b_tot_neg_cost - FF07_{IPMR_header}_[O]_F1_5_c_AUW - FF07_{IPMR_header}_[Y]_F1_6_c_CBB + FF03_{cost}_[K]_DB + FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt + FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt) <> 0

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 28, Management Value: "The project target cost [TAB] must be reconciled with the performance measurement baseline and management reserve."

Page 28, Intent: "Reconcile the project value (target cost [TAB] plus authorized, unpriced work) with the sum of all control account budgets, indirect budgets, management reserves, and undistributed budgets."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.01.01**	(16.02.01) (105)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Direct Costs

6. Metric Intent

This metric confirms that the manner in which the contractor classifies its direct costs, direct labor, material, and ODC, are consistent with the accounting system including the approved disclosure statement. This metric verifies the project's direct costs are consistent with the approved disclosure statement.

7. Metric Short Description

direct costs, EVMS cost tool <> accounting system

8. Metric

X = Number of WP and PP WBS by EOC in the EVMS cost tool, where the direct costs are not consistent with the approved disclosure statement or the contractor cannot demonstrate random time card audits within the last quarter.

Y = Number of WP and PP WBS by EOC in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} approved disclosure statement time card audits data presented by contractor	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- The direct costs are not consistent with the accounting system including the approved disclosure statement or the contractor cannot demonstrate random time card audits within the last quarter.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type

X
qualifier
operation

15. Reference(s)

Page 29, Typical Attribute(s): "Contractor’s cost accounting standards disclosure statement identifying treatment of direct costs (direct material, labor, and other direct costs), indirect costs, depreciation and capitalization, and other costs and credits."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.02.01**	(16.01.01) (106)	automated/manual	quarterly

5. Attribute

Actual Cost Reconciliation

6. Metric Intent

This metric confirms that the ACWP from the cost system is reconciled each month with the actual costs from the accounting system. This metric identifies the count of differences between the cumulative ACWP in both the cost system and the accounting system for the same period.

7. Metric Short Description

ACWPc, EVMS cost tool <> accounting system

I A

8. Metric

X = ACWPc in the EVMS cost tool, <> accounting system.

Y = ACWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1000		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} accounting system	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[M]_ACWPc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[B]_CPP_status_date items and, if identified, with the following characteristics.

- Sum FF03_{cost}_[M]_ACWPc

Determine X items, a subset of Y, based on the following.

Manually sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc <> accounting system

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sum

X
qualifier
operation

15. Reference(s)

Page 29, Intent: "Actual costs reported in the performance reports agree with the costs recorded in the general books of account (accounting system) or can be explained as timing differences."

Page 29, Typical Attributes: "Control account actual costs/general ledger reconciliation."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.01**	(16.03.01) (107)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric test confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC ACWPc does not differ from the BCWPc.

7. Metric Short Description

A without P (cumulative) non-material/overhead

a A

8. Metric

X = $ total of non-material and non-overhead WP WBS ACWPc in the EVMS cost tool, where ACWPc > $1K and BCWPc <= 0.

Y = $ total of non-material and non-overhead WP WBS ACWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- Sum abs(FF03_{cost}_[M]_ACWPc)

Y
qualifier
WBS type
EOC
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_ACWPc > 1,000
- FF03_{cost}_[L]_BCWPc <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.02**	(16.03.02) (108)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC BCWPc does not differ from the ACWPc.

7. Metric Short Description

P without A (cumulative) non-material/overhead

a A

8. Metric

X = $ total of non-material and non-overhead WP WBS BCWPc in the EVMS cost tool, where BCWPc > $1K and ACWPc <= 0.

Y = $ total of non-material and non-overhead WP WBS BCWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- Sum abs(FF03_{cost}_[L]_BCWPc)

Y
qualifier
WBS type
EOC
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[L]_BCWPc > 1,000
- FF03_{cost}_[M]_ACWPc <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[L]_BCWPc

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.03**	(16.03.03) (109)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC ACWPi does not differ from the BCWPi.

7. Metric Short Description

P without A (incremental) non-material/overhead

a A

8. Metric

X = $ total of non-material and non-overhead WP WBS BCWPi in the EVMS cost tool, where BCWPi > $1K and ACWPi <= 0.

Y = $ total of non-material and non-overhead WP WBS BCWPi in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- Sum abs(FF03_{cost}_[L]_inc_BCWP_dollars)

Y
qualifier
WBS type
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[L]_inc_BCWP_dollars > 1,000
- FF03_{cost}_[M]_inc_ACWP_dollars <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[L]_inc_BCWP_dollars

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.04**	(16.03.04) (110)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC BCWPi does not differ from the ACWPi.

7. Metric Short Description

A without P (incremental) non-material/overhead

a A

8. Metric

X = $ total of non-material and non-overhead WP WBS ACWPi in the EVMS cost tool, where ACWPi > $1K and BCWPi <= 0.

Y = $ total of non-material and non-overhead WP WBS ACWPi in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- Sum abs(FF03_{cost}_[M]_inc_ACWP_dollars)

Y
qualifier
WBS type
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_inc_ACWP_dollars > 1,000
- FF03_{cost}_[L]_inc_BCWP_dollars <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_inc_ACWP_dollars

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.05**	(16.03.05) (111)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric test confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC BCWPc = BAC (or 100%) with ACWPc <= $0.

7. Metric Short Description

P without A (cumulative) non-material/overhead completed

a A

8. Metric

X = $ total of completed non-material and non-overhead WP WBS BCWPc in the EVMS cost tool, where ACWPc <= 0.

Y = $ total of completed non-material and non-overhead WP WBS BCWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- FF03_{cost}_[L]_BCWPc = FF03_{cost}_[K]_DB
- Sum abs(FF03_{cost}_[L]_BCWPc)

Y
qualifier
WBS type
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_ACWPc <= 0

Sum flagged items based on the following operation(s).

- abs(FF03_{cost}_[L]_BCWPc)

X
qualifier
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.03.06**	(16.04.01) (112)	automated	monthly

5. Attribute

Recording Direct Costs to Control Accounts (CAs) and/or Work Packages (WP)

6. Metric Intent

This metric confirms that direct costs are recorded in the CA on the same basis as budgets were established and, at a minimum, by EOC. This metric ensures the dollar value of the CA or WP (or where costs are collected) for non-material direct EOC BCWPc = BAC (or 100%) with ACWPi > $0 and BCWPi <= $0.

7. Metric Short Description

A without P (incremental) non-material/overhead completed

a A

8. Metric

X = $ total of direct non-material WP WBS abs(ACWPi) in the EVMS cost tool, where WBS is complete and BCWPi <= 0.

Y = $ total of direct non-material WP WBS abs(ACWPi) in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1000	1	1.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[E]_EOC <> material or overhead
- Sum abs(FF03_{cost}_[M]_inc_ACWP_dollars)

Y
qualifier
WBS type
EOC
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[L]_inc_BCWP_dollars <= 0 where FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- FF03_{cost}_[L]_BCWPc = FF03_{cost}_[K]_DB

Sum flagged items based on the following operation(s).

- abs(FF03_{cost}_[M]_inc_ACWP_dollars) where FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 29, Intent: "At a minimum, actual costs are collected at the control account level to enable summarization of cost by both the WBS and OBS.

Page 29, Typical Attributes: "Contractor’s accounting manual/procedures identifying the methodology of handling various actual costs.

Page 29, Intent: "Accumulate direct costs in the formal accounting system in a manner consistent with the way the related work is planned and budgeted."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.04.01**	(17.01.01) (113)	automated	monthly

5. Attribute

Direct Cost Breakdown Summary

6. Metric Intent

This metric confirms that direct costs are summarized by CA level without allocation of a single CA to two or more higher-level WBS elements. This metric identifies the count of occurrences where the sum of the children ACWP for the current period and for each CA does not equal the parent ACWP value for the same period and for each CA. The metric identifies the count of occurences where the sum of the ACWP at the CA level for the current period does not equal the higher level WBS ACWP value for the same period.

7. Metric Short Description

EVMS cost tool ACWP <> IPMR F1 ACWP (incremental)

a

8. Metric

X = Number of CA WBSs in the EVMS cost tool, where
1. At the CA level, the EVMS cost tool $ total ACWPi <> IPMR F1 $ total ACWPi, or
2. At the project level, the EVMS cost tool $ total ACWPi <> IPMR F1 $ total ACWPi.

Y = Number of CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS} FF03_{cost}	FF08_{IPMR_F1}	FF01_{WBS}_[C]_WBS FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[M]_inc_ACWP_dollars FF08_{IPMR_F1}_[C]_WBS FF08_{IPMR_F1}_[F]_inc_ACWP

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF01_{WBS}_[C]_WBS,FF03_{cost}_[D]_WBS per CA items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = CA or WP

WBS type

Determine X items, a subset of Y, based on the following.

X

Identify FF08_{IPMR_F1}_[C]_WBS,FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = CA

other 1

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date

other 2

Count flagged items based on the following operation(s).

qualifier

- by CA
  FF03_{cost}_[M]_inc_ACWP_dollars sum <> FF08_{IPMR_F1}_[F]_inc_ACWP sum
  OR
  by project
  FF03_{cost}_[M]_inc_ACWP_dollars sum <> FF08_{IPMR_F1}_[F]_inc_ACWP sum

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 30, Management Value: "The WBS roll-up structure contains no division/allocation of lower-level cost to multiple higher-level WBS elements, which helps to ensure performance measurement data integrity when summarized by WBS."

Page 30, Intent: "Through the use of this coding structure, allowable costs collected within the control account by element of expense roll-up from the control account level through the WBS to the top level without being divided among two or more higher-level WBS elements. Cost collection accounts map to the WBS, and the WBS roll-up structure contains no division/allocation of lower-level cost to multiple higher-level WBS elements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
D	**D.04.02**	(18.01.01) (114)	automated	monthly

5. Attribute

Direct Cost Breakdown Summary

6. Metric Intent

This metric confirms that direct costs are summarized by CA level through the OBS hierarchy without allocation of a single CA to two or more higher-level OBS elements. The OBS must not allocate the same costs to multiple OBS elements to maintain the integrity of the performance measurement data and information. This metric identifies the count of occurrences where the sum of the ACWP at the CA level for the current period does not equal the higher level WBS ACWP value for the same period.

7. Metric Short Description

EVMS cost tool ACWP <> IPMR F2 ACWP (cumulative)

a

8. Metric

X = Number of CA OBSs in the EVMS cost tool, where EVMS cost tool $ total ACWPc <> IPMR F2 ACWPc.

Y = Number of CA OBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.2

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}_[L]_BCWPc
FF09_{IPMR_F2}	FF03_{cost}_[M]_ACWPc
	FF09_{IPMR_F2}_[I]_cum_ACWP

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

- FF03_{cost}_[L]_BCWPc > 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc <> FF09_{IPMR_F2}_[I]_cum_ACWP

Determine if X or X/Y exceeds the threshold.

x

other 1

qualifier

operation

15. Reference(s)

Page 32, Management Value: "Cost collection accounts mapped to the OBS, and the OBS roll-up structure containing no division/allocation of lower-level cost to multiple higher-level OBS elements, helps to ensure performance measurement data integrity when it is summarized by OBS."

Page 32, Intent: "Allowable costs collected within the control account by element of expense "roll-up", from the control account level through the OBS, to the top level without being divided at any level among two or more higher-level elements."

Page 32, Typical Attribute(s): "Established project charge numbers to ensure actual costs are collected so that direct comparison with associated budgets can be made at the appropriate organizational level(s)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.01.01**	(04.01.01) (115)	manual	annually

5. Attribute

Indirect Account Organization Structure

6. Metric Intent

This metric confirms that a documented process clearly defines the indirect account structure, the indirect manager's assignments, responsibilities, and authority, and how indirect budgets established, and cost expenditures are controlled. This metric includes an examination of the disclosure statement to identify each cost pool; obtaining the indirect budgets for each pool; identifying the personnel assigned for each indirect budget pool; and determining if the budgets are consistent with the pools and the organizations responsible for management of the resources.

7. Metric Short Description

disclosure statement indirect budgets unsubstantiated

8. Metric

X = Number of indirect budgets for each pool in the disclosure statement, where
1. The contractor manager is not identified,
2. The budgets are not consistent with the pools and the organizations responsible for the management of the resources, typically at a senior management level,
3. The contactor manager cannot demonstrate for all levels evidence on whether an item is a direct change, indirect, or a capital item, and who approves the policy, or
4. There are draft proposed changes to the disclosure statement.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.2

12. Needed Artifacts and Data Elements

X artifact(s)

disclosure statement (including proposed changes)
organization chart
indirect budget pools
data presented by contractor manager

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- Number of indirect budgets for each pool in the disclosure statement, where
  1. The contractor manager is not identified,
  2. The budgets are not consistent with the pools and the organizations responsible for the management of the resources, typically at a senior management level,
  3. The contactor manager cannot demonstrate for all levels evidence on whether an item is a direct change, indirect, or a capital item, and who approves the policy, or
  4. There are draft proposed changes to the disclosure statement.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 8, Typical Attribute(s) (A1): "Indirect account structure and organizational assignment/authority level are clearly defined."

Page 8, Typical Attribute(s) (A2): "Documented process clearly defines: How indirect cost resources are assigned, budgets are established, and expense is controlled. The personnel within the organization responsible for establishing indirect cost budgets and authorizing/controlling indirect cost expenditures."

Page 8, Intent: "Clearly identify managers who are assigned responsibility and authority for controlling indirect costs, and who have the authority to approve expenditure of resources."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.02.01**	(13.01.01) (116)	manual	annually

5. Attribute

Indirect Budget Management

6. Metric Intent

This metric confirms that indirect budgets are managed and incorporated into the PMB in concert with the contractor's documented processes and current rates to include approved, provisional, and proposed rate usage. This metric verifies the contractor has recurring DOE rate performance reviews using a combination of artifact reviews and the technical explanations provided by the indirect manager.

7. Metric Short Description

indirect process in not place

8. Metric

X =
1. The contractor has not conducted a rate performance review with DOE within past year.
2. The contractor business entity does not have a formal pricing rate agreement with DOE considering when it was last revised.
3. The contractor does not have a process for indirect management regarding budging, actuals, and analysis.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.6

12. Needed Artifacts and Data Elements

X artifact(s)
DOE or contractor rate performance review data presented by contractor

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- 1. The contractor has not conducted a rate performance review with DOE within past year.
  2. The contractor business entity does not have a formal pricing rate agreement with DOE considering when it was last revised.
  3. The contractor does not have a process for indirect management regarding budging, actuals, and analysis.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 24, Intent: "Indirect budgets on the project are established and planned with the established direct budgets consistent with the method by which allocation of indirect costs will ultimately be made to the project."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.02.02**	(13.01.02) (117)	automated/manual	annually

5. Attribute

Indirect Budget Management

6. Metric Intent

This metric confirms that indirect budgets are managed and incorporated into the PMB in concert with the contractor's documented processes and current rates to include approved, provisional, and proposed rate usage. This metric identifies the count of instances where the rate listed on the accounting rate table does not equal the rate listed on the cost system at the activity level for both BL and FC plans.

7. Metric Short Description

rates <> EVMS cost tool table or BL IMS or FC IMSs

8. Metric

X = Number of rates (sample size) in the accounting rate table, where the accounting rate table rate does not match EVMS cost tool rate table, the BL IMS rate (sample activities), or the FC IMS rate (sample activities).

Y = Number of rates (sample size) in the accounting rate table.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		1.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF20_{rates}	EVMS cost table xer BL xer FC	FF20_{rates}_[C]_WBS FF20_{rates}_[D]_resource_ID FF20_{rates}_[E]_burden_ID FF20_{rates}_[F]_FY FF20_{rates}_[H]_I_rate FF20_{rates}_[I]_EOC

13. Assumptions

Sampling of activities should include representation of all the resource pools.

14. Instructions

Determine Y items based on the following.

Count FF20_{rates}_[D]_resource_ID per FF20_{rates}_[C]_WBS items and, if identified, with the following characteristics.

- FF20_{rates}_[E]_burden_ID <> null

Y
qualifier
other 1

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Rates (sample size) in the accounting rate table, where the accounting rate table rate does not match EVMS cost tool rate table, the BL schedule rate (sample activities), or the FC schedule rate (sample activities).

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 24, Intent: "Indirect budgets on the project are established and planned with the established direct budgets consistent with the method by which allocation of indirect costs will ultimately be made to the project."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.02.03**	(13.01.03) (118)	automated/manual	annually

5. Attribute

Indirect Budget Management

6. Metric Intent

This metric confirms that indirect budgets are managed and incorporated into the PMB in concert with the contractor's documented processes and current rates to include approved, provisional, and proposed rate usage. This metric identifies the count of instances where the rates used for select BCRs do not match the current rates in the cost system. Note: Sample 25% of BCR based on highest dollar value.

7. Metric Short Description

BCR rates <> EVMS cost tool table

8. Metric

X = Number of BCRs (sample size) in the change control log, where rates used in BCRs at the activity level do not match current rates in the EVMS cost tool table.

Y = Number of BCRs (sample size) in the change control log.
Sample size of 25% of BCRs in past year with the highest dollar value.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		1.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF11_{CC_log}	FF20_{rates}	FF11_{CC_log}_[C]_BCR_ID
	EVMS cost table	FF11_{CC_log}_[D]_approved_date
	xer BL	FF11_{CC_log}_[E]_BCR_description
	xer FC	FF11_{CC_log}_[I]_BCR_dollars_delta
		CPP-12_FF11_{CC_log}_[B]_CPP_status_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF11_{CC_log}_[C]_BCR_ID items and, if identified, with the following characteristics.

- FF11_{CC_log}_[D]_approved_date > CPP-12_FF11_{CC_log}_[B]_CPP_status_date
- FF11_{CC_log}_[E]_BCR_description <listing>
- FF11_{CC_log}_[I]_BCR_dollars_delta <listing>

Y
qualifier
other 1
other 2
other 3

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- BCRs (sample size of 25% of BCRs in past year with highest dollar value) in the change control log, where rates used in BCRs at the activity level do not match current rates in the EVMS cost tool table.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 24, Intent: "Indirect budgets on the project are established and planned with the established direct budgets consistent with the method by which allocation of indirect costs will ultimately be made to the project."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.03.01**	(19.01.01) (119)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Record/Allocate Indirect Costs

6. Metric Intent

This metric confirms that indirect costs are applied in accordance with the SD and disclosure statement. This metric identifies the count of occurrences where the indirect costs are not applied in accordance with the SD and disclosure statement.

7. Metric Short Description

indirect costs unsubstantiated

8. Metric

X =
1. The contractor cannot demonstrate their documented process for routinely reviewing indirect changes and errors are corrected.
2. The contractor's changes are not consistent with the budget categories in the disclosure statement.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.4

12. Needed Artifacts and Data Elements

X artifact(s)

current year indirect budget by cost element
report of charges to overhead charge numbers
cost collection account structure
WBS/cost collection mapping
cost accounting standards disclosure statement
data presented by contractor

13. Assumptions

14. Instructions

Conduct the following manual operation(s).

manual

operation

- 1. The contractor cannot demonstrate their documented process for routinely reviewing indirect changes and errors are corrected.
  2. The contractor's changes are not consistent with the budget categories in the disclosure statement.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 33, Intent: "Record all indirect costs for the project in the accounting system. Allocate them to the recorded direct costs per the documented procedure to ensure that all projects benefiting from the indirect costs will receive their fair share."

Page 33, Typical Attribute(s): "Cost accounting standards disclosure statement. Identifies the allocation base and indirect cost pools by functional element of cost."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.04.01**	(24.01.01) (120)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Indirect Variance Analysis

6. Metric Intent

This metric confirms that indirect cost variances are identified, analyzed, and reported routinely and adequate corrective actions are taken to remedy issues. This metric determines whether monthly VAR analysis occurs for each indirect rate pool.

7. Metric Short Description

VAR analysis or actions unsubstantiated

8. Metric

X =
1. The contractor does not perform monthly VAR analysis at both the pool and the subordinate cost element levels including if documented thresholds were exceeded, or
2. The contractor does not take actions to mitigate significant variances or does not plan for potential rate changes, or
3. The contractor does not implement process for updating the year-end forecast.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

X artifact(s)
indirect cost variance analyses
data presented by contractor

13. Assumptions

14. Instructions

manual operation

Conduct the following manual operation(s).

- 1. The contractor does not perform monthly variance analysis at both the pool and the subordinate cost element levels including if documented thresholds were exceeded, or
  2. The contractor does not take actions to mitigate significant variances or does not plan for potential rate changes, or
  3. The contractor does not implement process for updating the year-end forecast.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 40, Intent: "Indirect rate forecast and control are crucial to meeting project cost objectives. This guideline requires a monthly indirect cost analysis, by those assigned responsibility, comparing indirect budgets to indirect actual costs and explaining the cause of resultant variance(s)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
E	**E.04.02**	(24.02.01) (121)	manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Indirect Variance Analysis

6. Metric Intent

This metric confirms that indirect rate thresholds are established for each budget and pool category. This metric determines whether appropriate thresholds are established for VAR analysis by budget and pool.

7. Metric Short Description

indirect rate thresholds unsubstantiated

8. Metric

X = The contractor's budget officer cannot demonstrate indirect rate thresholds for each budget and pool category were established.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.3

12. Needed Artifacts and Data Elements

X artifact(s)
indirect cost variance thresholds
indirect cost management procedure
data presented by contractor

13. Assumptions

14. Instructions

Conduct the following manual operation(s).

manual operation

- The contractor's budget officer cannot demonstrate indirect rate thresholds for each budget and pool category were established.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 40, Typical Attribute(s): "Variance thresholds by indirect cost category."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.01.01**	(22.01.01) (122)	automated	monthly

5. Attribute

Calculating Variances

6. Metric Intent

This metric confirms that the formulas to calculate SV, CV, and VAC are consistent with the data produced by the accounting system and include budget, earned value, and actual costs that are reconcilable with the EMV and accounting systems.

7. Metric Short Description

VAR, EVMS cost tool <> IPMR F1 [a]

8. Metric

X = Number of CA WBSs in the EVMS cost tool, with incorrect variance calculations.

Y = Number of CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} FF08_{IPMR_F1}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[M]_inc_ACWP_dollars FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc FF08_{IPMR_F1}_[C]_WBS FF08_{IPMR_F1}_[D]_inc_BCWS FF08_{IPMR_F1}_[E]_inc_BCWP FF08_{IPMR_F1}_[F]_inc_ACWP FF08_{IPMR_F1}_[G]_cum_BCWS FF08_{IPMR_F1}_[H]_cum_BCWP FF08_{IPMR_F1}_[I]_cum_ACWP FF08_{IPMR_F1}_[J]_BAC FF08_{IPMR_F1}_[K]_EAC

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[G]_WBS_type = CA [WBS type]

Determine X items, a subset of Y, based on the following. [X]

Identify FF03_{cost}_[D]_WBS,FF08_{IPMR_F1}_[C]_WBS and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation [other 1]

Count flagged items based on the following operation(s). [qualifier]

- FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[K]_inc_BCWS_dollars <> FF08_{IPMR_F1}_[E]_inc_BCWP - FF08_{IPMR_F1}_[D]_inc_BCWS [operation]
  OR
  FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[M]_inc_ACWP_dollars <> FF08_{IPMR_F1}_[E]_inc_BCWP - FF08_{IPMR_F1}_[F]_inc_ACWP
  OR
  FF03_{cost}_[L]_BCWPc - FF03_{cost}_[K]_BCWSc <> FF08_{IPMR_F1}_[H]_cum_BCWP - FF08_{IPMR_F1}_[G]_cum_BCWS
  OR
  FF03_{cost}_[L]_BCWPc - FF03_{cost}_[M]_ACWPc <> FF08_{IPMR_F1}_[H]_cum_BCWP - FF08_{IPMR_F1}_[I]_cum_ACWP
  OR
  FF03_{cost}_[K]_DB - FF03_{cost}_[M]_ACWPc - FF03_{cost}_[N]_ETCc <> FF08_{IPMR_F1}_[J]_BAC - FF08_{IPMR_F1}_[K]_EAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 37, Typical Attribute(s): "Monthly performance report:

• Budget, earned value, and actual costs (reconcilable with the accounting system).
• Cost Variance (CV).
• Schedule Variance (SV).
• Variance at Completion (VAC)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.01.02**	(22.02.01) (123)	automated/manual	monthly

5. Attribute

Calculating Variances

6. Metric Intent

This metric confirms that BCWP calculated in a manner consistent with the way work is planned. This metric identifies the count of incomplete discrete WPs that have a reported BCWPi that is not consistent with the WP budget value and EVT methodology.

7. Metric Short Description

BCWPi not consistent with budget and EVT

I H

8. Metric

X = Number of incomplete in-progress discrete WP WBSs in the EVMS cost tool, where current reporting period BCWPi in the EVMS cost tool BCWPi is not consistent with BCWSi and EVT in the EVMS cost tool or is not consistent with the associated WP activity EVTs in the FC IMS.

Y = Number of incomplete in-progress discrete WP WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.7

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} FF04_{schedule} schedule and cost documents	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[L]_inc_BCWP_dollars FF04_{schedule}_[K]_EV_method

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[L]_BCWPc > 0
- FF03_{cost}_[L]_inc_BCWP_dollar <> 0/null
- FF03_{cost}_[K]_inc_BCWS_dollars <listing>
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation

Y
qualifier
WBS type
incomplete
EVT
other 1
other 2
other 3
other 4

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- FF03_{cost}_[L]_inc_BCWP_dollars is not consistent with FF03_{cost}_[K]_inc_BCWS_dollars and FF03_{cost}_[J]_EV_method
  OR
  FF03_{cost}_[L]_inc_BCWP_dollars is not consistent with FF04_{schedule}_[K]_EV_method in the FC schedule

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 37, Intent: "The intent of this guideline is to recognize that analysis must be accomplished on a regular, periodic basis. It is critical that the calculation of earned value (see guidelines 7 and 10) be based consistently with the manner used to establish the budgets (see guidelines 8, 10, and 12). This ensures a generation of valid variances for analysis purposes."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.02.01**	(23.01.01) (124)	automated	monthly

5. Attribute

Variances to Control Accounts (CA)

6. Metric Intent

This metric confirms that CA cost, schedule, and technical variances are documented in accordance with internal thresholds and are addressed. This metric identifies the count of incomplete CAs with cost elements that breach reporting threshold levels in accordance with the system description and/or contract requirements that do not contain the requisite narrative.

7. Metric Short Description

VAR without narrative

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool that tripped thresholds per CPP upload, that do not have VAR narrative.

Y = Number of incomplete CA WBSs in the EVMS cost tool that tripped thresholds per CPP upload.
Thresholds consider schedule and cost, incremental and cumulative, at completion, and dollar and percentage.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} FF07_{IPMR_header}	FF14_{CAM_VAR} FF15_{VAR_CA_LOG}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_BCWSc FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_inc_ACWP_dollars FF03_{cost}_[M]_ACWPc FF07_{IPMR_header}_[AK]_threshold_cum_dollar FF07_{IPMR_header}_[AL]_threshold_cum_pct FF07_{IPMR_header}_[AM]_threshold_inc_dollar FF07_{IPMR_header}_[AN]_threshold_inc_pct FF14_{CAM_VAR}_[C]_WBS FF14_{CAM_VAR}_[D]_RC_CV FF14_{CAM_VAR}_[E]_RC_SV FF14_{CAM_VAR}_[F]_impact_cost FF14_{CAM_VAR}_[G]_impact_schedule FF14_{CAM_VAR}_[H]_CR_cost FF14_{CAM_VAR}_[I]_CR_schedule FF14_{CAM_VAR}_[J]_VAC_narrative FF15_{VAR_CA_LOG}_[E]_WBS FF15_{VAR_CA_LOG}_[G]_CR_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[K]_inc_BCWS_dollars) > FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  OR
  abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  OR
  abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[K]_inc_BCWS_dollars) > FF07_{IPMR_header}_[AN]_threshold_inc_pct
  OR
  abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct)
  OR
  abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[M]_inc_ACWP_dollars) > FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  OR
  abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  OR

Y
qualifier
WBS type
incomplete
other 1

abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[M]_inc_ACWP_dollars) > FF07_{IPMR_header}_[AN]_threshold_inc_pct
OR
abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct)

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation

other 2

x

qualifier

qualifier

operation

Determine X items, a subset of Y, based on the following.

Identify FF14_{CAM_VAR}_[C]_WBS,FF15_{VAR_CA_LOG}_[E]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- IF CV > threshold THEN
  (FF14_{CAM_VAR}_[D]_RC_CV = null
  OR
  FF14_{CAM_VAR}_[F]_impact_cost = null
  OR
  FF14_{CAM_VAR}_[H]_CR_cost = null)
  OR
  IF SV > threshold THEN
  (FF14_{CAM_VAR}_[E]_RC_SV = null
  OR
  FF14_{CAM_VAR}_[G]_impact_schedule = null
  OR
  FF14_{CAM_VAR}_[I]_CR_schedule = null)
  OR
  IF VAC > threshold THEN
  FF14_{CAM_VAR}_[J]_VAC_narrative = null
  OR
  FF15_{VAR_CA_LOG}_[G]_CR_narrative = null

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 38, Management Value: "The ability to analyze deviations from the established plan permits management at all levels to rapidly and effectively implement corrective actions in an effort to regain project/contract objectives."

Page 38, Intent: "The purpose of this guideline is to ensure both significant schedule and cost variances are analyzed, at least monthly, at a level of detail required to manage the effort; i.e., to enable management decision-making and corrective action."

Page 38, Intent: "Only variances that have a significant impact on the execution of the project should be analyzed in detail. Project procedures defining thresholds are normally used to define the significant level applicable to that situation."

Page 38, Typical Attribute(s): "Variance causes and impacts are identified in sufficient detail needed for project management."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.02.02**	(23.01.02) (125)	automated/manual	monthly

5. Attribute

Variances to Control Accounts (CA)

6. Metric Intent

This metric confirms that CA cost, schedule, and technical variances are documented in accordance with internal thresholds and are addressed. This metric identifies the count of incomplete CAs with cost elements that breach reporting threshold levels that do not address minimum VAR content.

7. Metric Short Description

VAR inadequate

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool that tripped thresholds, that do not address the minimum content as applicable factoring the VAR quality checklist SOP.

Y = Number of incomplete CA WBSs in the EVMS cost tool that tripped thresholds.
Thresholds consider schedule and cost, incremental and cumulative, at completion, and dollar and percentage.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF14_{CAM_VAR}	FF03_{cost}_[D]_WBS
FF07_{IPMR_header}	FF15_{VAR_CA_LOG}	FF03_{cost}_[G]_WBS_type
FF14_{CAM_VAR}		FF03_{cost}_[K]_inc_BCWS_dollars
FF15_{VAR_CA_LOG}		FF03_{cost}_[K]_BCWSc
		FF03_{cost}_[K]_DB
		FF03_{cost}_[L]_inc_BCWP_dollars
		FF03_{cost}_[L]_BCWPc
		FF03_{cost}_[M]_inc_ACWP_dollars
		FF03_{cost}_[M]_ACWPc
		FF07_{IPMR_header}_[AK]_threshold_cum_dollar
		FF07_{IPMR_header}_[AL]_threshold_cum_pct
		FF07_{IPMR_header}_[AM]_threshold_inc_dollar
		FF07_{IPMR_header}_[AN]_threshold_inc_pct
		FF14_{CAM_VAR}_[C]_WBS
		FF14_{CAM_VAR}_[D]_RC_CV
		FF14_{CAM_VAR}_[E]_RC_SV
		FF14_{CAM_VAR}_[J]_VAC_narrative
		FF15_{VAR_CA_LOG}_[E]_WBS
		FF15_{VAR_CA_LOG}_[G]_CR_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- (abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[K]_inc_BCWS_dollars) >
  FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[K]_inc_BCWS_dollars) >
  FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[K]_BCWSc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct)
  OR
  (abs(FF03_{cost}_[L]_inc_BCWP_dollars - FF03_{cost}_[M]_inc_ACWP_dollars) >
  FF07_{IPMR_header}_[AM]_threshold_inc_dollar
  AND
  abs(FF03_{cost}_[L]_BCWPc - FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AK]_threshold_cum_dollar
  AND
  abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[M]_inc_ACWP_dollars) >
  FF07_{IPMR_header}_[AN]_threshold_inc_pct
  AND
  abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc) > FF07_{IPMR_header}_[AL]_threshold_cum_pct)

Y
qualifier
WBS type
incomplete
other 1

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation
- FF14_{CAM_VAR}_[D]_RC_CV <listing>
- FF14_{CAM_VAR}_[E]_RC_SV <listing>
- FF14_{CAM_VAR}_[J]_VAC_narrative <listing>
- FF15_{VAR_CA_LOG}_[G]_CR_narrative <listing>

other 2
other 3
other 4
other 5
other 6

Determine X items, a subset of Y, based on the following.

x

Identify FF14_{CAM_VAR}_[C]_WBS,FF15_{VAR_CA_LOG}_[E]_WBS and, if identified, with the following characteristics.

qualifier

Manually count flagged items based on the following operation(s).

qualifier

- VARs considering the VAR quality checklist are questionable.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 38, Management Value: "The ability to analyze deviations from the established plan permits management at all levels to rapidly and effectively implement corrective actions in an effort to regain project/contract objectives."

Page 38, Intent: "The purpose of this guideline is to ensure both significant schedule and cost variances are analyzed, at least monthly, at a level of detail required to manage the effort; i.e., to enable management decision-making and corrective action."

Page 38, Intent: "Only variances that have a significant impact on the execution of the project should be analyzed in detail. Project procedures defining thresholds are normally used to define the significant level applicable to that situation."

Page 38, Typical Attribute(s): "Variance causes and impacts are identified in sufficient detail needed for project management."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.02.03**	(23.02.01) (126)	automated/manual verification	initially & semi-annually to align with horizon planning increments

5. Attribute

Variances to Control Accounts (CA)

6. Metric Intent

This metric looks to ensure variance thresholds have been established and documented for CV, SV, and VAC, and then looks to determine if the thresholds are meaningful for the type and value of work being performed.

7. Metric Short Description

VAR thresholds unsubstantiated

a

8. Metric

X =
1. CV, SV, and VAC thresholds are not documented, or
2. CV, SV, and VAC thresholds are not appropriate for performance insights.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header} VAR threshold documents	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[AK]_threshold_cum_dollar FF07_{IPMR_header}_[AL]_threshold_cum_pct FF07_{IPMR_header}_[AM]_threshold_inc_dollar FF07_{IPMR_header}_[AN]_threshold_inc_pct FF07_{IPMR_header}_[AO]_threshold_ACT_dollar FF07_{IPMR_header}_[AP]_threshold_ACT_pct

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Identify FF07_{IPMR_header}_[B]_CPP_status_date and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF07_{IPMR_header}_[AK]_threshold_cum_dollar <> null
  OR
  FF07_{IPMR_header}_[AL]_threshold_cum_pct <> null
  OR
  FF07_{IPMR_header}_[AM]_threshold_inc_dollar <> null
  OR
  FF07_{IPMR_header}_[AN]_threshold_inc_pct <> null
  OR
  FF07_{IPMR_header}_[AO]_threshold_ACT_dollar <> null
  OR
  FF07_{IPMR_header}_[AP]_threshold_ACT_pct <> null

operation

Conduct the following manual operation(s).

manual

- 1. CV, SV, and VAC thresholds are not documented, or
  2. CV, SV, and VAC thresholds are not appropriate for performance insights.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 38, Intent: "Only variances that have a significant impact on the execution of the project should be analyzed in detail. Project procedures defining thresholds are normally used to define the significant level applicable to that situation."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.03.01**	(25.01.01) (127)	automated	quarterly

5. Attribute

Performance Measurement Information

6. Metric Intent

This metric confirms that performance measurement data is summarized through the project organization and WBS to support management needs and client reporting requirements. The metric identifies the count of occurrences for incomplete CAs WP and PP where the sum of the current period and cumulative BCWS, BCWP, ACWP, BAC, or EAC in the cost system does not equal the current period and cumulative BCWS, BCWP, ACWP, BAC, or EAC in the IPMR F1.

7. Metric Short Description

EVMS cost tool <> IPMR F1 CA WBS BCWSi/c, BCWPi/c, ACWPi/c, DB, EAC [a]

8. Metric

X = Number of CAs in the EVMS cost tool, where EVMS cost tool BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc <> IPMR F1 BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc.

Y = Number of CAs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} FF08_{IPMR_F1}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_BCWSc FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_inc_ACWP_dollars FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc FF08_{IPMR_F1}_[C]_WBS FF08_{IPMR_F1}_[D]_inc_BCWS FF08_{IPMR_F1}_[E]_inc_BCWP FF08_{IPMR_F1}_[F]_inc_ACWP FF08_{IPMR_F1}_[G]_cum_BCWS FF08_{IPMR_F1}_[H]_cum_BCWP FF08_{IPMR_F1}_[I]_cum_ACWP FF08_{IPMR_F1}_[J]_BAC FF08_{IPMR_F1}_[K]_EAC

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF03_{cost}_[D]_WBS per CA items and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[G]_WBS_type = CA [WBS type]

Determine X items, a subset of Y, based on the following. [X]

Identify FF08_{IPMR_F1}_[C]_WBS per CA and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation [other 1]

Count flagged items based on the following operation(s). [qualifier]

- FF03_{cost}_[K]_inc_BCWS_dollars <> FF08_{IPMR_F1}_[D]_inc_BCWS [operation]
  OR
  FF03_{cost}_[L]_inc_BCWP_dollars <> FF08_{IPMR_F1}_[E]_inc_BCWP
  OR
  FF03_{cost}_[M]_inc_ACWP_dollars <> FF08_{IPMR_F1}_[F]_inc_ACWP
  OR
  FF03_{cost}_[K]_BCWSc <> FF08_{IPMR_F1}_[G]_cum_BCWS
  OR
  FF03_{cost}_[L]_BCWPc <> FF08_{IPMR_F1}_[H]_cum_BCWP
  OR
  FF03_{cost}_[M]_ACWPc <> FF08_{IPMR_F1}_[I]_cum_ACWP
  OR
  FF03_{cost}_[K]_DB <> FF08_{IPMR_F1}_[J]_BAC
  OR

FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc <> FF08_{IPMR_F1}_[K]_EAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 41, Intent: "Since the WBS and the OBS exist as a formal and disciplined framework for project management and also provide a formal structure for the comprehensive roll-up of all data elements, they become the ideal framework for summarizing data from the control account level to the management reporting level. Summarizing performance information assists senior levels of management to focus on the significant problems that require their intervention."

Page 41, Typical Attribute(s): "Schedule and cost performance reports.
• Schedule variance, cost variance, and variance at completion from control account up through WBS/OBS reporting structure hierarchy to total program level.
• Management action plans. Corrective action plan/mitigation plan, task, milestones, exit criteria, and schedules."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.03.02**	(25.01.02) (128)	automated	quarterly

5. Attribute

Performance Measurement Information

6. Metric Intent

This metric confirms that performance measurement data is summarized through the project organization and WBS to support management needs and client reporting requirements. The metric identifies the count of differences between the total dollar values for current and cumulative period BCWS, BCWP, ACWP, BAC, or EAC in the cost system and the total dollar values of the current and cumulative period BCWS, BCWP, ACWP, BAC, or EAC in the IPMR F1.

7. Metric Short Description

EVMS cost tool <> IPMR F1 project BCWSi, BCWPi, ACWPi

a

8. Metric

X = $ total of project in the EVMS cost tool, where EVMS cost tool BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc <> IPMR F1 BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.1

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}_[B]_CPP_status_date
FF08_{IPMR_F1}	FF03_{cost}_[C]_period_date
	FF03_{cost}_[K]_inc_BCWS_dollars
	FF03_{cost}_[K]_BCWSc
	FF03_{cost}_[K]_DB
	FF03_{cost}_[L]_inc_BCWP_dollars
	FF03_{cost}_[L]_BCWPc
	FF03_{cost}_[M]_inc_ACWP_dollars
	FF03_{cost}_[M]_ACWPc
	FF03_{cost}_[N]_ETCc
	FF08_{IPMR_F1}_[B]_CPP_status_date
	FF08_{IPMR_F1}_[D]_inc_BCWS
	FF08_{IPMR_F1}_[E]_inc_BCWP
	FF08_{IPMR_F1}_[F]_inc_ACWP
	FF08_{IPMR_F1}_[G]_cum_BCWS
	FF08_{IPMR_F1}_[H]_cum_BCWP
	FF08_{IPMR_F1}_[I]_cum_ACWP
	FF08_{IPMR_F1}_[J]_BAC
	FF08_{IPMR_F1}_[K]_EAC

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Identify FF03_{cost}_[B]_CPP_status_date,FF08_{IPMR_F1}_[B]_CPP_status_date and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation

other 1

Sum flagged items based on the following operation(s).

qualifier

operation

- FF03_{cost}_[K]_inc_BCWS_dollars <> FF08_{IPMR_F1}_[D]_inc_BCWS
  OR
  FF03_{cost}_[L]_inc_BCWP_dollars <> FF08_{IPMR_F1}_[E]_inc_BCWP
  OR
  FF03_{cost}_[M]_inc_ACWP_dollars <> FF08_{IPMR_F1}_[F]_inc_ACWP
  OR
  FF03_{cost}_[K]_BCWSc <> FF08_{IPMR_F1}_[G]_cum_BCWS
  OR
  FF03_{cost}_[L]_BCWPc <> FF08_{IPMR_F1}_[H]_cum_BCWP
  OR
  FF03_{cost}_[M]_ACWPc <> FF08_{IPMR_F1}_[I]_cum_ACWP
  OR
  FF03_{cost}_[K]_DB <> FF08_{IPMR_F1}_[J]_BAC
  OR
  FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc <> FF08_{IPMR_F1}_[K]_EAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 41, Intent: "Since the WBS and the OBS exist as a formal and disciplined framework for project management and also provide a formal structure for the comprehensive roll-up of all data elements, they become the ideal framework for summarizing data from the control account level to the management reporting level. Summarizing performance information assists senior levels of management to focus on the significant problems that require their intervention."

Page 41, Typical Attribute(s): "Schedule and cost performance reports.
• Schedule variance, cost variance, and variance at completion from control account up through WBS/OBS reporting structure hierarchy to total program level.
• Management action plans. Corrective action plan/mitigation plan, task, milestones, exit criteria, and schedules."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 25.01.03 to 25.01.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.03.03**	(25.01.03) (129)	automated	quarterly

5. Attribute

Performance Measurement Information

6. Metric Intent

This metric confirms that performance measurement data is summarized through the project organization and WBS to support management needs and client reporting requirements. This metric identifies the count of differences where the sum of the current period and cumulative CA WP and PP for BCWS, BCWP, ACWP, BAC, or EAC in the cost system does not equal the current period and cumulative CA BCWS, BCWP, ACWP, BAC, or EAC in the IPMR F2.

7. Metric Short Description

EVMS cost tool <> IPMR F2 CA WBS BCWSi/c, BCWPi/c, ACWPi/c, DB, EAC [a]

8. Metric

X = Number of CAs in the EVMS cost tool, where EVMS cost tool BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc <> IPMR F2 BCWSi, BCWPi, ACWPi, BCWSc, BCWPc, ACWPc, DB, or EACc

Y = Number of CAs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF01_{WBS} FF03_{cost}	FF03_{cost} FF09_{IPMR_F2}	FF01_{WBS}_[H]_OBS FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[F]_OBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[K]_BCWSc FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_inc_ACWP_dollars FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc FF09_{IPMR_F2}_[C]_OBS FF09_{IPMR_F2}_[D]_inc_BCWS FF09_{IPMR_F2}_[E]_inc_BCWP FF09_{IPMR_F2}_[F]_inc_ACWP FF09_{IPMR_F2}_[G]_cum_BCWS FF09_{IPMR_F2}_[H]_cum_BCWP FF09_{IPMR_F2}_[I]_cum_ACWP FF09_{IPMR_F2}_[J]_BAC FF09_{IPMR_F2}_[K]_EAC

13. Assumptions

14. Instructions

Determine Y items based on the following. [Y]

Count FF01_{WBS}_[H]_OBS in FF03_{cost} items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA [qualifier] [WBS type]

Determine X items, a subset of Y, based on the following. [X]

Identify FF09_{IPMR_F2}_[C]_OBS by CA and, if identified, with the following characteristics. [qualifier]

- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date for incremental operation [other 1]

Count flagged items based on the following operation(s). [qualifier] [operation]

- FF03_{cost}_[K]_inc_BCWS_dollars <> FF09_{IPMR_F2}_[D]_inc_BCWS
  OR
  FF03_{cost}_[L]_inc_BCWP_dollars <> FF09_{IPMR_F2}_[E]_inc_BCWP
  OR
  FF03_{cost}_[M]_inc_ACWP_dollars <> FF09_{IPMR_F2}_[F]_inc_ACWP
  OR
  FF03_{cost}_[K]_BCWSc <> FF09_{IPMR_F2}_[G]_cum_BCWS
  OR
  FF03_{cost}_[L]_BCWPc <> FF09_{IPMR_F2}_[H]_cum_BCWP
  OR
  FF03_{cost}_[M]_ACWPc <> FF09_{IPMR_F2}_[I]_cum_ACWP
  OR
  FF03_{cost}_[K]_DB <> FF09_{IPMR_F2}_[J]_BAC

OR
FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc <> FF09_{IPMR_F2}_[K]_EAC

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 41, Intent: "Since the WBS and the OBS exist as a formal and disciplined framework for project management and also provide a formal structure for the comprehensive roll-up of all data elements, they become the ideal framework for summarizing data from the control account level to the management reporting level. Summarizing performance information assists senior levels of management to focus on the significant problems that require their intervention."

Page 41, Typical Attribute(s): "Schedule and cost performance reports.
• Schedule variance, cost variance, and variance at completion from control account up through WBS/OBS reporting structure hierarchy to total program level.
• Management action plans. Corrective action plan/mitigation plan, task, milestones, exit criteria, and schedules."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 25.01.05 to 25.01.03.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.04.01**	(26.01.01) (130)	manual	monthly

5. Attribute

Management Analysis and Corrective Actions

6. Metric Intent

This metric confirms that there is evidence the contractor uses and analyzes EVMS data and information (at least on a monthly basis) as a part of their decision-making. This metric determines whether the contractor has established a documented business rhythm that jointly reviews EVMS data and information with CAMs for monthly management decision making using a combination of artifact review and the technical explanations provided by the PM and CAMs.

7. Metric Short Description

monthly EVMS review unsubstantiated

8. Metric

X = The contractor's project manager cannot demonstrate there is an established business rhythm to monthly review EVMS data with CAMs for management decision making.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

X artifact(s)

monthly business rhythm
calendar
data presented by contractor

13. Assumptions

14. Instructions

Conduct the following manual operation(s).

manual operation

- The contractor cannot demonstrate there is an established business rhythm to monthly review EVM information with CAMs for management decision making.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 42, Intent: "Performance measurement data should be utilized by all levels of management to promote effective project execution. Because of this, the data produced by the earned value management system must be available to managers on a timely basis and must be of sufficient quality to ensure that effective integrated program management decisions can be made as a result of its analysis."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.04.02**	(26.01.02) (131)	manual	monthly

5. Attribute

Management Analysis and Corrective Actions

6. Metric Intent

This metric confirms that there is evidence the contractor uses and analyzes EVMS data and information (at least on a monthly basis) as a part of their decision-making. This metric determines whether management actions are resulting from EVMS generated data and information communicated to the DOE customer.

7. Metric Short Description

EVMS use unsubstantiated

8. Metric

X = The contractor cannot demonstrate management actions are based on EVMS generated data communicated to DOE.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

X artifact(s)

cost tool (source data)
IPMR F1, F2, F3, F5
monthly performance review
data presented by contractor

13. Assumptions

14. Instructions

Conduct the following manual operation(s).

manual

operation

- The contractor cannot demonstrate management actions are based on EVMS generated data communicated to DOE.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 42, Intent: "Performance measurement data should be utilized by all levels of management to promote effective project execution. Because of this, the data produced by the earned value management system must be available to managers on a timely basis and must be of sufficient quality to ensure that effective integrated program management decisions can be made as a result of its analysis."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.04.03**	(26.02.01) (132)	automated/manual	quarterly

5. Attribute

Management Analysis and Corrective Actions

6. Metric Intent

This metric confirms the implementation of corrective actions to reduce cost and/or schedule impacts include a completion schedule and the identification of person(s) responsible for executing the corrective action plan. This metric determines whether corrective actions are a result of cost and schedule VAR analysis.

7. Metric Short Description

VAR analysis or corrective actions unsubstantiated

8. Metric

X = Number of CA WBSs in the VAR analysis, where the contractor cannot demonstrate
1. An established corrective action process that includes documented description, reference to variance, responsibility, due date, forecast date, demonstrated actions to address variances or impacts, and risks updated or
2. The VAR corrective action log includes IPMR F5 (similar per the SD) corrective actions are up to date.

Y = Number of CA WBSs in the VAR analysis.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF14_{CAM_VAR}	FF14_{CAM_VAR}	FF03_{cost}_[D]_WBS
FF03_{cost}	FF15_{VAR_CA_LOG}	FF03_{cost}_[G]_WBS_type
	FF03_{cost}	FF14_{CAM_VAR}_[C]_WBS
	corrective action process	FF14_{CAM_VAR}_[D]_RC_CV
	corrective action log	FF14_{CAM_VAR}_[E]_RC_SV
	IPMR F5	FF14_{CAM_VAR}_[K]_CR_required
	SD	FF15_{VAR_CA_LOG}_[C]_CR_ID
	data presented by contractor	FF15_{VAR_CA_LOG}_[E]_WBS
		FF15_{VAR_CA_LOG}_[G]_CR_narrative

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF14_{CAM_VAR}_[C]_WBS,FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF14_{CAM_VAR}_[D]_RC_CV <> null
  OR
  FF14_{CAM_VAR}_[E]_RC_SV <> null

Y
qualifier
WBS type
other 1

Determine X items, a subset of Y, based on the following.

Identify FF15_{VAR_CA_LOG}_[E]_WBS and, if identified, with the following characteristics.

- FF15_{VAR_CA_LOG}_[C]_CR_ID <listing>
- FF15_{VAR_CA_LOG}_[G]_CR_narrative <listing>

X
qualifier
other 1
other 2

Manually count flagged items based on the following operation(s).

- The contractor cannot demonstrate
  1. An established corrective action process that includes documented description, reference to variance, responsibility, due date, forecast date, demonstrated actions to address variances or impacts, and risks updated or
  2. The VAR corrective action log includes IPMR F5 (similar per the SD) corrective actions are up to date.

qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 42, Management Value: "Earned value management information provides management with early insight into the extent of problems. Management action is required to mitigate the impacts on the project objectives."

Page 42, Intent: "Identify and implement corrective actions based on earned value variance analysis to achieve project objectives. Regular monitoring of the performance data helps keep the program within its cost and schedule baseline objectives."

Page 42, Intent: "For effective management control, the corrective actions should be identified at the appropriate level and then tracked to resolution and closure. A manager's assigned action should have sufficient authority and control over the resources to effectively implement the corrective action requirements."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.01**	(27.01.01) (133)	automated	monthly

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that estimates of costs at completion are generated with sufficient frequency to provide identification of future cost problems in time for possible corrective or preventive actions. This metric identifies the count of occurrences for selected CAs where the ACWPc value > EAC value.

7. Metric Short Description

EAC < ACWPc

a A

8. Metric

X = Number of CA WBSs in the EVMS cost tool, where EVMS cost tool or IPMR F1 EAC < EVMS cost tool ACWPc.

Y = Number of CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1	2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} FF08_{IPMR_F1}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc FF08_{IPMR_F1}_[K]_EAC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA

Y
qualifier
WBS type

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc > FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc
  OR
  FF03_{cost}_[M]_ACWPc > FF08_{IPMR_F1}_[K]_EAC

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 43, Intent: "The control account managers are responsible for maintaining the control account level latest revised estimate to complete that is assessed on a monthly basis. Periodically, a comprehensive or bottom-up estimate at completion should be prepared using all available information to arrive at the best possible estimate at completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.02**	(27.01.02) (134)	automated/manual	monthly

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that estimates of costs at completion are generated with sufficient frequency to provide identification of future cost problems in time for possible corrective or preventive actions. This metric identifies the count of occurrences for selected incomplete CAs with reported and/or potential performance and/or scope concerns where the monthly EAC is not maintained.

7. Metric Short Description

EAC unsubstantiated

I H

8. Metric

X = Number of incomplete CA WBSs in the EVMS cost tool, where
1. EAC is not maintained,
2. EAC does not factor performance or scope trends, or
3. EAC does not factor potential performance or scope issues.

Y = Number of incomplete CA WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	CA trend(s) documentation	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = CA
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc <> 0/null

Y
qualifier
WBS type
incomplete
other 1

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- 1. EAC is not maintained,
  2. EAC does not factor performance or scope trends, or
  3. EAC does not factor potential performance or scope issues.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 43, Intent: "The control account managers are responsible for maintaining the control account level latest revised estimate to complete that is assessed on a monthly basis. Periodically, a comprehensive or bottom-up estimate at completion should be prepared using all available information to arrive at the best possible estimate at completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.03**	(27.02.01) (135)	automated	monthly

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that estimates of costs at completion generated at the level where resources are planned and actual costs are collected. This metric identifies the count of occurrences for selected incomplete WP and PP, and SLPP that do not have a time-phased ETC by EOC.

7. Metric Short Description

ETC <= 0

a A

8. Metric

X = Number of incomplete WP, PP, and SLPP WBSs by EOC in the EVMS cost tool, that do not have a time-phased ETC.

Y = Number of incomplete WP, PP, and SLPP WBSs by EOC in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[N]_ETCc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP or SLPP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF03_{cost}_[N]_ETCc <= 0

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 44, Typical Attribute(s): "Control account manager should generate the Estimate to Complete (ETC) at the work package and planning package level. The sum of the control account manager's work package and planning package ETCs are added to the control account actual cost to develop the control account EAC. Control account EACs are summarized through the WBS and OBS to the program and contract level."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.05**	(27.03.01) (136)	automated/manual verification	annually

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that CA estimates of costs at completion are accurate, detailed, and an unembellished depiction of the cost of the project. This metric identifies the count of occurrences for selected incomplete WP, PP, and SLPP where the time-phased ETC in the cost system does not aligned to the time-phased resource plan (by craft).

7. Metric Short Description

ETC labor units, EVMS cost tool <> FC IMS

a A

8. Metric

X = Number of incomplete PP and WP WBSs (only EOC labor) for the current period in the EVMS cost tool, where EVMS cost tool time-phased ETC units <> FC IMS units.

Y = Number of incomplete PP and WP WBSs (only EOC labor) for the current period in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} FF06_{schedule_resources} FF04_{schedule}	FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[G]_WBS FF06_{schedule_resources}_[C]_schedule_type FF06_{schedule_resources}_[E]_task_ID FF06_{schedule_resources}_[H]_EOC

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[C]_period_date per FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[E]_EOC = labor

Y qualifier WBS type **incomplete** EOC

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[C]_period_date per FF04_{schedule}_[G]_WBS,(FF04_{schedule}_[D]_task_ID,FF06_{schedule_resources}_[E]_task_ID) and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC, FF06_{schedule_resources}_[C]_schedule_type = FC
- FF06_{schedule_resources}_[H]_EOC = labor

X qualifier sch. type other 1

Count flagged items based on the following operation(s).

- FF03_{cost}_[C]_period_date for X <> FF03_{cost}_[C]_period_date for Y

qualifier operation

Conduct the following manual operation(s).

- Resource availability is questionable.

manual operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 43, Intent: "For the monthly estimates to complete (ETC), the control account manager should review the status of the expended effort and the achievability of the forecast and significant changes briefed to program management. This analysis should focus on performance to date within the control account, an assessment of the effort to complete the remaining work, and an evaluation of the type and quantity of resources required to complete the effort. Issues, risks and opportunities should also be considered in this analysis. When updates are made to existing forecasts of the schedule and cost to complete, significant changes are briefed to program management. Prudent maintenance of the control account-level estimates at completion ensures that the EAC reflects a valid projection of project costs."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.06**	(27.03.02) (137)	automated	monthly

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that estimates of costs at completion are accurate and detailed. This metric identifies the count of occurrences for selected incomplete CA, WP, and PP where difference between CPIc and TCPIc is < -0.10 or > 0.10.

7. Metric Short Description

abs(CPIc – EAC TCPIc) > 0.1

a A

8. Metric

X = Number of incomplete WP WBSs in the EVMS cost tool, where abs(CPIc – EAC TCPIc) > 0.1.

Y = Number of incomplete WP WBSs in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc FF03_{cost}_[N]_ETCc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or CA where actuals are accounted
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- abs(FF03_{cost}_[L]_BCWPc / FF03_{cost}_[M]_ACWPc - (FF03_{cost}_[K]_DB - FF03_{cost}_[L]_BCWPc) / FF03_{cost}_[N]_ETCc) > 0.1

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
incomplete

X
qualifier
qualifier
operation

15. Reference(s)

Page 43, Intent: "For the monthly estimates to complete (ETC), the control account manager should review the status of the expended effort and the achievability of the forecast and significant changes briefed to program management. This analysis should focus on performance to date within the control account, an assessment of the effort to complete the remaining work, and an evaluation of the type and quantity of resources required to complete the effort. Issues, risks and opportunities should also be considered in this analysis. When updates are made to existing forecasts of the schedule and cost to complete, significant changes are briefed to program management. Prudent maintenance of the control account-level estimates at completion ensures that the EAC reflects a valid projection of project costs."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.07**	(27.03.03) (138)	automated/manual	quarterly

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that CA estimates of costs at completion are accurate, detailed, and an unembellished depiction of the cost of the project. This metric identifies the count of occurrences for selected incomplete WP, PP, and SLPP where direct and indirect rates are not applied correctly to the time-phased ETC by EOC.

7. Metric Short Description

direct and indirect rates not correctly applied

I H

8. Metric

X = Number of incomplete PP, SLPP, and WP WBSs by EOC (sample size) in the EVMS cost tool, where direct and indirect rates are not correctly applied to the time-phased ETC.

Y = Number of incomplete PP, SLPP, and WP WBSs by EOC (sample size) in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	rate tables	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP or SLPP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- WP, PP, and SLPP direct and indirect rates that are not applied correctly to the time-phased ETC by EOC (sampling). Identify differences between cost system rates against accounting rates.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 43, Intent: "For the monthly estimates to complete (ETC), the control account manager should review the status of the expended effort and the achievability of the forecast and significant changes briefed to program management. This analysis should focus on performance to date within the control account, an assessment of the effort to complete the remaining work, and an evaluation of the type and quantity of resources required to complete the effort. Issues, risks and opportunities should also be considered in this analysis. When updates are made to existing forecasts of the schedule and cost to complete, significant changes are briefed to program management. Prudent maintenance of the control account-level estimates at completion ensures that the EAC reflects a valid projection of project costs."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
F	**F.05.08**	(27.04.01) (139)	manual	annually

5. Attribute

Estimates at Completion (EAC)

6. Metric Intent

This metric confirms that annual comprehensive estimates of costs at completion are prepared. This metric determines whether the comprehensive EAC adequately considers rates, programmatic risks and opportunities, open material commitments, subcontractor performance, and the evaluation of the costs/resources required to complete all remaining work scope.

7. Metric Short Description

annual comprehensive EAC unsubstantitated

8. Metric

X = The latest annual comprehensive EAC, that
1. Does not contain ground rules and assumptions, rates, threats and opportunities, assessment of commitments, subcontractor status, or performance of remaining scope,
2. Is not supported by a BOE or does not address EOCs,
3. Is not validated with indexes, as appropriate, or
4. Is not addressed in the following month as the most likely EAC.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.6

12. Needed Artifacts and Data Elements

X artifact(s)
comprehensive EAC kickoff package and backup data presented by contractor

13. Assumptions

14. Instructions

manual operation

Conduct the following manual operation(s).

- The latest annual comprehensive EAC, that
  1. Does not contain ground rules and assumptions, rates, threats and opportunities, assessment of commitments, subcontractor status, or performance of remaining scope,
  2. Is not supported by a BOE or does not address EOCs,
  3. Is not validated with indexes, as appropriate, or
  4. Is not addressed in the following month as the most likely EAC.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 43, Intent: "For the comprehensive estimate at completion, many of the same factors included in the monthly evaluation at the control account level are considered as well as:
• Evaluating both direct and indirect performance to date efficiency achieved by performing organizations for completed work and comparing it to remaining budgets and the scope of work.
• Assessing commitment values for material to complete the remaining work.
• Evaluation of subcontractor assessments of cost to complete their efforts.
• Estimating future conditions to derive the most accurate estimate at completion; e.g., projected rate changes, process improvements that may result in reduced costs, or other economic factors that may impact future costs."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.02**	(28.01.01) (140)	automated	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes are incorporated in the PMB in a timely manner. This metric identifies the count of occurrences for PMB changes where the incorporation date is > 44 work days from the baseline change approval date.

7. Metric Short Description

change implementation delayed

8. Metric

X = Number of approved changes in the change control log, that were not implemented within 44 work days.

Y = Number of approved changes in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF11_{CC_log}	FF11_{CC_log}	FF11_{CC_log}_[B]_CPP_status_date FF11_{CC_log}_[C]_BCR_ID FF11_{CC_log}_[D]_approved_date FF11_{CC_log}_[F]_implementation_date

13. Assumptions

44 work days is approximately 60 calendar days.

14. Instructions

Determine Y items based on the following.

Count FF11_{CC_log}_[C]_BCR_ID items and, if identified, with the following characteristics.

- FF11_{CC_log}_[D]_approved_date <> null

Determine X items, a subset of Y, based on the following.

Identify FF11_{CC_log}_[C]_BCR_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- (FF11_{CC_log}_[F]_implementation_date = null
  AND
  FF11_{CC_log}_[B]_CPP_status_date - FF11_{CC_log}_[D]_approved_date > 60)
  OR
  FF11_{CC_log}_[F]_implementation_date - FF11_{CC_log}_[D]_approved_date > 60

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1

X
qualifier
qualifier
operation

15. Reference(s)

Page 45, Intent: "Incorporate the work scope for authorized changes into the performance measurement BL in a documented, disciplined, and timely manner."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.03**	(28.01.02) (141)	automated	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes are incorporated in the PMB in a timely manner. This metric identifies the count of occurrences for PMB changes where emerging work is started prior to receiving authorization approval within 44 work days.

7. Metric Short Description

change implemented prior approval or not implemented

8. Metric

X = Number of unapproved changes in the change control log, that were implemented within 44 work days.

Y = Number of unapproved changes in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
10.0%		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF11_{CC_log}	FF11_{CC_log}	FF11_{CC_log}_[C]_BCR_ID FF11_{CC_log}_[D]_approved_date FF11_{CC_log}_[F]_implementation_date

13. Assumptions

44 work days is approximately 60 calendar days.

14. Instructions

Determine Y items based on the following.

Count FF11_{CC_log}_[C]_BCR_ID items and, if identified, with the following characteristics.

- FF11_{CC_log}_[F]_implementation_date <listing>

Determine X items, a subset of Y, based on the following.

Identify FF11_{CC_log}_[C]_BCR_ID and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF11_{CC_log}_[F]_implementation_date > FF11_{CC_log}_[D]_approved_date + 60
  OR
  FF11_{CC_log}_[F]_implementation_date = null

Conduct the following manual operation(s).

- Verify manually.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1

X
qualifier
qualifier
operation

manual
operation

15. Reference(s)

Page 45, Intent: "Incorporate the work scope for authorized changes into the performance measurement BL in a documented, disciplined, and timely manner."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.04**	(28.01.03) (142)	automated	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes are incorporated in the PMB in a timely manner. This metric identifies the count of occurrences for PMB changes where definitized work scope is not distributed from UB within 44 work days.

7. Metric Short Description

UB distribution delayed

8. Metric

X = The number of UB changes in last 2 reporting periods in the change control log, that were not distributed within 44 work days.

Y = The number of UB changes in last 2 reporting periods in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF12_{CC_log_detail}	FF12_{CC_log_detail}	FF12_{CC_log_detail}_[D]_BCR_ID
CPP-2_FF12_{CC_log_detail}	CPP-1_FF12_{CC_log_detail}	FF12_{CC_log_detail}_[F]_trn_category
	CPP-2_FF12_{CC_log_detail}	FF12_{CC_log_detail}_[I]_credit_dollars
		FF12_{CC_log_detail}_[K]_debit_dollars
		CPP-1_FF12_{CC_log_detail}_[K]_debit_dollars
		CPP-2_FF12_{CC_log_detail}_[B]_CPP_status_date
		CPP-2_FF12_{CC_log_detail}_[K]_debit_dollars
		CPP-2_FF12_{CC_log_detail}_[I]_credit_dollars

13. Assumptions

44 work days is approximately 2 reporting periods.
1 reporting period flexibility.

14. Instructions

Determine Y items based on the following.

Y

Count FF12_{CC_log_detail}_[D]_BCR_ID per CPP-2_FF12_{CC_log_detail}_[B]_CPP_status_date items and, if identified, with the following characteristics.

qualifier

- FF12_{CC_log_detail}_[F]_trn_category = UB

other 1

- Sum FF12_{CC_log_detail}_[I]_credit_dollars

sum

Determine X items, a subset of Y, based on the following.

X

Identify FF12_{CC_log_detail}_[D]_BCR_ID and, if identified, with the following characteristics.

qualifier

- FF12_{CC_log_detail}_[F]_trn_category = UB

other 1

Count flagged items based on the following operation(s).

qualifier

- FF12_{CC_log_detail}_[K]_debit_dollars + CPP-1_FF12_{CC_log_detail}_[K]_debit_dollars + CPP-2_FF12_{CC_log_detail}_[K]_debit_dollars <> CPP-2_FF12_{CC_log_detail}_[I]_credit_dollars

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 45, Intent: "Incorporate the work scope for authorized changes into the performance measurement BL in a documented, disciplined, and timely manner."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.05**	(28.01.04) (143)	automated/manual	annually

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes are incorporated in the PMB in a timely manner. This metric identifies the count of occurrences for CBB changes where the work scope and budget for DOE contingency and AUW is not implemented in the same reporting period.

7. Metric Short Description

contingency usage not documented

8. Metric

X = The number of DB, UB, or MR changes in last 12 reporting periods in the change control log, where usage of DOE schedule or cost contingency (factoring AUW and NTE) was not appropriately reflected in the same reporting period documents including the contract modification, WAD, schedule, and EVMS cost tool.

Y = The number of DB, UB, or MR changes in last 12 reporting periods in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.3

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF12_{CC_log_detail} for last 12 CPPs	CBB log change documentation contingency log	FF12_{CC_log_detail}_[D]_BCR_ID FF12_{CC_log_detail}_[F]_trn_category FF12_{CC_log_detail}_[I]_credit_dollars FF12_{CC_log_detail}_[K]_debit_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF12_{CC_log_detail}_[D]_BCR_ID for last 12 CPPs items and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = DB or UB or MR
- FF12_{CC_log_detail}_[I]_credit_dollars + FF12_{CC_log_detail}_[K]_debit_dollars <> prior_CPP (FF12_{CC_log_detail}_[I]_credit_dollars + FF12_{CC_log_detail}_[K]_debit_dollars)

Y
qualifier
other 1
other 2

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Usage of DOE schedule or cost contingency (factoring AUW and NTE) was not appropriately reflected in the same reporting period documents including the contract modification, WAD, schedule, and EVMS cost tool.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 45, Intent: "Incorporate the work scope for authorized changes into the performance measurement BL in a documented, disciplined, and timely manner."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.06**	(28.02.01) (144)	manual	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that for unpriced changes detailed planning is maintained for near-term work in the BL and remaining work scope being held in UB upon definitization is distributed to CAs, SLPPs, or MR. This metric determines whether the full scope of AUW is in the BL.

7. Metric Short Description

AUW partially implemented

8. Metric

X = The number of AUW changes in the change control log, where the full scope was not implemented in the BL or not detailed planned for the near-term work per the SD or NTE was not documented.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.3

12. Needed Artifacts and Data Elements

X artifact(s)
CBB log
change documentation

13. Assumptions

14. Instructions

Conduct the following manual operation(s). manual operation

- AUW changes in the change control log, where the full scope was not implemented in the BL or not detailed planned for the near-term work per the SD or NTE was not documented.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 45, Intent: "For unpriced change order,…Near term effort should be planned and have budget in control accounts. Far term effort that cannot be reasonably planned in the near term may be planned in summary level planning packages or maintained in Undistributed Budget (UB). Until contractual definitization, the near-term work is continually planned. After definitization, any budget remaining in undistributed budget will be planned and budgeted within control accounts, summary level planning package packages, or management reserve, as soon as practical."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.08**	(32.01.01) (145)	automated	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes to the PMB are documented and traceable. This metric identifies where there is a difference between the IPMR F1 block 8.14.g CBB/TAB value and the IPMR F3 header 5.e CBB value or 5.f TAB value, and block 8.16 CBB/TAB value.

7. Metric Short Description

TAB, IPMR F1 <> IPMR F3

8. Metric

X = Number of TAB in the IPMR F1 <> CBB or TAB in the IPMR F3.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.3

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[B]_CPP_status_date
FF10_{IPMR_F3}	FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt
	FF07_{IPMR_header}_[AI]_F3_5_f_TAB
	FF10_{IPMR_F3}_[B]_CPP_status_date
	FF10_{IPMR_F3}_[D]_cum_BCWS
	FF10_{IPMR_F3}_[E]_inc_BCWS
	FF10_{IPMR_F3}_[F]_inc_BCWS_M1
	FF10_{IPMR_F3}_[G]_inc_BCWS_M2
	FF10_{IPMR_F3}_[H]_inc_BCWS_M3
	FF10_{IPMR_F3}_[I]_inc_BCWS_M4
	FF10_{IPMR_F3}_[J]_inc_BCWS_M5
	FF10_{IPMR_F3}_[K]_inc_BCWS_M6
	FF10_{IPMR_F3}_[L]_inc_BCWS_P7
	FF10_{IPMR_F3}_[M]_inc_BCWS_P8
	FF10_{IPMR_F3}_[N]_inc_BCWS_P9
	FF10_{IPMR_F3}_[O]_inc_BCWS_P10
	FF10_{IPMR_F3}_[P]_inc_BCWS_PRJ_remaining
	FF10_{IPMR_F3}_[Q]_undistributed_budget

13. Assumptions

TAB = CBB + overrun

14. Instructions

Determine X items, a subset of Y, based on the following. x

Identify FF07_{IPMR_header}_[B]_CPP_status_date,FF10_{IPMR_F3}_[B]_CPP_status_date and, if identified, with the following characteristics. qualifier

Count flagged items based on the following operation(s). qualifier

- FF07_{IPMR_header}_[AI]_F3_5_f_TAB <> FF10_{IPMR_F3}_[D]_cum_BCWS + FF10_{IPMR_F3}_[E]_inc_BCWS + FF10_{IPMR_F3}_[F]_inc_BCWS_M1 + FF10_{IPMR_F3}_[G]_inc_BCWS_M2 + FF10_{IPMR_F3}_[H]_inc_BCWS_M3 + FF10_{IPMR_F3}_[I]_inc_BCWS_M4 + FF10_{IPMR_F3}_[J]_inc_BCWS_M5 + FF10_{IPMR_F3}_[K]_inc_BCWS_M6 + FF10_{IPMR_F3}_[L]_inc_BCWS_P7 + FF10_{IPMR_F3}_[M]_inc_BCWS_P8 + FF10_{IPMR_F3}_[N]_inc_BCWS_P9 + FF10_{IPMR_F3}_[O]_inc_BCWS_P10 + FF10_{IPMR_F3}_[P]_inc_BCWS_PRJ_remaining + FF10_{IPMR_F3}_[Q]_undistributed_budget + FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 53, Management Value: "By ensuring that budget and schedule revisions are documented and traceable, the integrity of the performance measurement baseline is maintained and can be verified. This provides control account managers with valid control account plans against which to execute and measure performance."

Page 53, Intent: "The performance measurement baseline should always reflect the most current plan for accomplishing the effort. Authorized changes must be promptly recorded in the system and incorporated into all relevant planning. Planning and authorization documents must be updated accordingly, prior to the commencement of new work."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.02.09**	(32.01.02) (146)	automated/manual verification	monthly

5. Attribute

Incorporate Changes in a Timely Manner

6. Metric Intent

This metric confirms that authorized changes to the PMB are documented and traceable. This metric identifies where there is a difference between the current period CBB log value and the previous period CBB log value and the difference is inconsistent with the government action and contingency value allocated for new work scope.

7. Metric Short Description

CBB with contingency usage unsubstantiated

a A

8. Metric

X = Number of current reporting period CBB <> prior reporting period CBB, where change is not consistent with change in cost contingency.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.3

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[B]_CPP_status_date
CPP-1_FF07_{IPMR_header}	FF07_{IPMR_header}_[Y]_F1_6_c_CBB
contingency log	CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Identify FF07_{IPMR_header}_[B]_CPP_status_date and, if identified, with the following characteristics.

Sum flagged items based on the following operation(s).

- FF07_{IPMR_header}_[Y]_F1_6_c_CBB <> CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB

Conduct the following manual operation(s).

- Change is not consistent with change in cost contingency.

Determine if X or X/Y exceeds the threshold.

x

qualifier

qualifier

operation

manual

operation

15. Reference(s)

Page 53, Management Value: "By ensuring that budget and schedule revisions are documented and traceable, the integrity of the performance measurement baseline is maintained and can be verified. This provides control account managers with valid control account plans against which to execute and measure performance."

Page 53, Intent: "The performance measurement baseline should always reflect the most current plan for accomplishing the effort. Authorized changes must be promptly recorded in the system and incorporated into all relevant planning. Planning and authorization documents must be updated accordingly, prior to the commencement of new work."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.03**	(14.02.01) (147)	automated	initially & semi-annually to align with horizon planning increments

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that the use of MR is controlled and that the appropriate records are maintained. This metric identifies the count of differences between the MR budget value listed on the IPMR F1 and the MR log budget value for the same period.

7. Metric Short Description

MR, change control log <> IPMR F1

8. Metric

X = Last 6 months of MR in the change control log, where change control log MR <> IPMR F1 MR.

Y = Last 6 months of MR in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF07_{IPMR_header} CPP-5_FF07_{IPMR_header}	FF07_{IPMR_header} FF12_{CC_log_detail}	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt FF12_{CC_log_detail}_[B]_CPP_status_date FF12_{CC_log_detail}_[F]_trn_category FF12_{CC_log_detail}_[I]_credit_dollars_cum FF12_{CC_log_detail}_[K]_debit_dollars_cum CPP-5_FF07_{IPMR_header}_[B]_CPP_status_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF07_{IPMR_header}_[B]_CPP_status_date items and, if identified, with the following characteristics.

- FF07_{IPMR_header}_[B]_CPP_status_date > CPP-5_FF07_{IPMR_header}_[B]_CPP_status_date

Determine X items, a subset of Y, based on the following.

Identify FF12_{CC_log_detail}_[B]_CPP_status_date and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = MR

Count flagged items based on the following operation(s).

- FF07_{IPMR_header}_[AF]_F1_8_f_MR_bgt <> FF12_{CC_log_detail}_[I]_credit_dollars_cum + FF12_{CC_log_detail}_[K]_debit_dollars_cum

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1

X
qualifier
other 1
qualifier
operation

15. Reference(s)

Page 26, Management Value: "Unexpected work scope growth within the contract SOW, rates changes, or schedule slips are examples of situations that may make the amount of performance measurement budget assigned to an individual control account manager inadequate. This facilitates maintaining budgets for work accomplished and provides effective performance measurement data for management."

Page 26, Typical Attributes: Program control logs including:
• Management reserve (showing month end values; monthly sources and applications to control accounts; and current value)."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.04**	(28.03.01) (148)	automated/manual	monthly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that the incorporation of changes does not arbitrarily eliminate existing cost and schedule variances. The metric identifies the count of occurrences for selected incomplete WP with BAC changes from the prior month to determine whether historical cost and schedule variances have been eliminated and, if so, regardless of dollar value, justified.

7. Metric Short Description

DB change unsubstantiated

8. Metric

X = Number of incomplete WP WBS DBs different from prior reporting period in the EVMS cost tool, where historical variance were eliminated or without justification.

Y = Number of incomplete WP WBS DBs different from prior reporting period in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1	2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} CPP-1_FF03_{cost}	BL change documentation SD	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc CPP-1_FF03_{cost}_[D]_WBS CPP-1_FF03_{cost}_[K]_DB

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS,CPP-1_FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[K]_DB <> CPP-1_FF03_{cost}_[K]_DB

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Historical variance were eliminated or without justification.

Determine if X or X/Y exceeds the threshold.

Y

qualifier

WBS type

incomplete

other 1

X

qualifier

operation

15. Reference(s)

Page 45 Intent: "Incorporating changes must not arbitrarily eliminate existing cost and schedule variances. Rate changes and economic price adjustments may be made as appropriate."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.05**	(29.01.01) (149)	automated/manual	quarterly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that BL changes are reconcilable to the prior BL, and that all change control documentation was appropriately completed. This metric identifies the count of occurrences for changes made within the freeze period, to the BL in the current month plus the following month.

7. Metric Short Description

BCWS change unsubstantiated in freeze period

8. Metric

X = Number of WBSs by EOC where current reporting period BCWSi <> prior month report period BCWSi in the EVMS cost tool, where change is not consistent with the SD or change process.

Y = Number of WBSs by EOC where current reporting period BCWSi <> prior month report period BCWSi in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} CPP-1_FF03_{cost}	CBB log change documentation SD	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[K]_inc_BCWS_dollars RP+1_CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars CPP-1_FF03_{cost}_[D]_WBS

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC,CPP-1_FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[K]_inc_BCWS_dollars <> RP+1_CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Change is not consistent with the SD or change process.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1
X
qualifier
operation

15. Reference(s)

Page 46, Management Value: "The reconciliation of current budgets to prior budgets ensures the baseline maintains data integrity and reconciliation to the contract value."

Page 47, Intent: "The use of program budget logs will assist in meeting the reconciliation intent of this guideline. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion."

Pages 47-48, Typical Attribute(s): "Contractual change documents (external). May take various forms, (e.g., contract modification, letter to proceed from contracts office or legal office, not-to-exceed letter, change order, engineering change order, delivery order, basic ordering agreement, etc.) that transmit and authorize the change or addition to work, budget, and schedule.
• Contractor's internal documentation (e.g., change request form, program directive, etc.) facilitating the change. It should provide the rationale/justification, approval process, work scope additions or deletions by integrated product team or WBS, dollars, changes to schedules, estimate at completion, etc.
• Change control logs including management reserve justification, dollar amount and receiving WBS; undistributed budget justification, dollar amount and receiving WBS; performance measurement baseline dollar amount; and contract budget base total.
• Statement of work (amendments or revisions), WBS (changes if applicable), and WBS dictionary (additions or deletions to scope).
• Work authorization documents authorizing new work scope, schedule, budget and authorization to proceed, if not already changed by the internal change request process.
• Control account/work package/planning package plans showing revised work scope, duration, and budget.
• Master schedules, intermediate schedules (if any), and detailed schedules showing revised work scope and duration, changes to revised work scope and duration, changes to linkages, etc."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.06**	(29.01.02) (150)	automated	monthly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that BL changes are reconcilable to the prior BL, and that all change control documentation was appropriately completed. This metric identifies where there is a difference between the current IPMR F1 CBB value and the prior month IPRM F1 CBB value.

7. Metric Short Description

CBB change, IPMR F1 <> change control log

8. Metric

X = $ total change between current reporting period IPMR F1 CBB and prior month reporting period IPMR F1 CBB <> current reporting period change control log CBB and prior month reporting period change control log CBB.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.0

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[Y]_F1_6_c_CBB
FF12_{CC_log_detail}	FF12_{CC_log_detail}_[I]_credit_dollars
CPP-1_FF07_{IPMR_header}	FF12_{CC_log_detail}_[K]_debit_dollars
	CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Sum flagged items based on the following operation(s).

- (FF07_{IPMR_header}_[Y]_F1_6_c_CBB - CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB) <> (FF12_{CC_log_detail}_[I]_credit_dollars + FF12_{CC_log_detail}_[K]_debit_dollars)

x

qualifier

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 46, Management Value: "The reconciliation of current budgets to prior budgets ensures the baseline maintains data integrity and reconciliation to the contract value."

Page 47, Intent: "The use of program budget logs will assist in meeting the reconciliation intent of this guideline. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion."

Pages 47-48, Typical Attribute(s): "Contractual change documents (external). May take various forms, (e.g., contract modification, letter to proceed from contracts office or legal office, not-to-exceed letter, change order, engineering change order, delivery order, basic ordering agreement, etc.) that transmit and authorize the change or addition to work, budget, and schedule.
• Contractor's internal documentation (e.g., change request form, program directive, etc.) facilitating the change. It should provide the rationale/justification, approval process, work scope additions or deletions by integrated product team or WBS, dollars, changes to schedules, estimate at completion, etc.
• Change control logs including management reserve justification, dollar amount and receiving WBS; undistributed budget justification, dollar amount and receiving WBS; performance measurement baseline dollar amount; and contract budget base total.
• Statement of work (amendments or revisions), WBS (changes if applicable), and WBS dictionary (additions or deletions to scope).
• Work authorization documents authorizing new work scope, schedule, budget and authorization to proceed, if not already changed by the internal change request process.
• Control account/work package/planning package plans showing revised work scope, duration, and budget.
• Master schedules, intermediate schedules (if any), and detailed schedules showing revised work scope and duration, changes to revised work scope and duration, changes to linkages, etc."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.07**	(29.01.03) (151)	automated/manual	monthly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that BL changes are reconcilable to the prior BL, and that all change control documentation was appropriately completed. This metric identifies the count of occurrences for incomplete WPs with current period time-phasing changes that have not been appropriately justified and/or documented, and/or have not been approved.

7. Metric Short Description

BCWS profile change unsubstantiated

8. Metric

X = Number of WP WBS by EOC with BCWSi profile is different from prior reporting month in the EVMS cost tool, where
1. Change was not approved by the CAM and the PM,
2. Change before and after schedule and cost are not documented, or
3. Change in time-phasing where significant is not discussed in the justification.

Y = Number of WP WBS by EOC with BCWSi profile is different from prior reporting month in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost} CPP-1_FF03_{cost}	FF03_{cost} change documentation	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS by FF03_{cost}_[E]_EOC items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[K]_inc_BCWS_dollars <profile> <> CPP-1_FF03_{cost}_[K]_inc_BCWS_dollars <profile>

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- 1. Change was not approved by the CAM and the PM,
  2. Change before and after schedule and cost are not documented, or
  3. Change in time-phasing where significant is not discussed in the justification.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
other 1

X
qualifier
operation

15. Reference(s)

Page 46, Management Value: "The reconciliation of current budgets to prior budgets ensures the baseline maintains data integrity and reconciliation to the contract value."

Page 47, Intent: "The use of program budget logs will assist in meeting the reconciliation intent of this guideline. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion."

Pages 47-48, Typical Attribute(s): "Contractual change documents (external). May take various forms, (e.g., contract modification, letter to proceed from contracts office or legal office, not-to-exceed letter, change order, engineering change order, delivery order, basic ordering agreement, etc.) that transmit and authorize the change or addition to work, budget, and schedule.
• Contractor's internal documentation (e.g., change request form, program directive, etc.) facilitating the change. It should provide the rationale/justification, approval process, work scope additions or deletions by integrated product team or WBS, dollars, changes to schedules, estimate at completion, etc.
• Change control logs including management reserve justification, dollar amount and receiving WBS; undistributed budget justification, dollar amount and receiving WBS; performance measurement baseline dollar amount; and contract budget base total.
• Statement of work (amendments or revisions), WBS (changes if applicable), and WBS dictionary (additions or deletions to scope).
• Work authorization documents authorizing new work scope, schedule, budget and authorization to proceed, if not already changed by the internal change request process.
• Control account/work package/planning package plans showing revised work scope, duration, and budget.
• Master schedules, intermediate schedules (if any), and detailed schedules showing revised work scope and duration, changes to revised work scope and duration, changes to linkages, etc."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.08**	(29.02.01) (152)	automated/manual	monthly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that changes to BCWS for open WPs are limited to re-phasing only future budget outside the freeze period. This metric identifies the count of occurrences for incomplete WP where BCWS is inappropriately re-phased in the freeze period.

7. Metric Short Description

PMB change unsubstantiated in freeze period

8. Metric

X = Number of PMB changes in the freeze period, where change does not meet the allowable SD exceptions.

Y = Number of PMB changes in the freeze period.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF11_{CC_log}	SD	FF11_{CC_log}_[B]_CPP_status_date FF11_{CC_log}_[C]_BCR_ID FF11_{CC_log}_[D]_approved_date FF11_{CC_log}_[F]_implementation_date FF11_{CC_log}_[I]_BCR_dollars_delta

13. Assumptions

FF11_{CC_log}_ reflects changes in the PMB.

14. Instructions

Determine Y items based on the following.

Count FF11_{CC_log}_[C]_BCR_ID items and, if identified, with the following characteristics.

- FF11_{CC_log}_[D]_approved_date [period] = FF11_{CC_log}_[B]_CPP_status_date
- FF11_{CC_log}_[F]_implementation_date [period] = FF11_{CC_log}_[B]_CPP_status_date
- FF11_{CC_log}_[I]_BCR_dollars_delta <> 0/null

Y
qualifier
other 1
other 2
other 3

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Change does not meet the allowable SD exceptions.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 47, Intent: "Budget changes are controlled and understood in terms of scope, resources, and schedule. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.09**	(29.02.02) (153)	automated	quarterly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that changes to BCWS for open WPs are limited to re-phasing only future budget outside the freeze period. This metric identifies the count of occurrences for incomplete WP where the current period BAC value does not match the previous month BAC value.

7. Metric Short Description

DB change unsubstantiated

a A

8. Metric

X = Number of open WP WBS DBs in the EVMS cost tool, where current reporting month DB <> prior reporting month DB.

Y = Number of open WP WBS DBs in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%	1	2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost} CPP-1_FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_DB FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc CPP-1_FF03_{cost}_[K]_DB

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[L]_BCWPc <> 0/null
  OR
  FF03_{cost}_[M]_ACWPc <> 0/null
- Sum FF03_{cost}_[K]_DB

Y
qualifier
WBS type
incomplete
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

Count flagged items based on the following operation(s).

- FF03_{cost}_[K]_DB <> CPP-1_FF03_{cost}_[K]_DB

X
qualifier
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 47, Intent: "Budget changes are controlled and understood in terms of scope, resources, and schedule. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.03.10**	(29.03.01) (154)	automated/manual	monthly

5. Attribute

Baseline Changes Reconciliation

6. Metric Intent

This metric confirms that the use of management reserve budget is appropriate and limited to authorized work that is in-scope to the contract. This metric identifies the count of occurrence where the use of MR is inappropriate.

7. Metric Short Description

MR transaction unsubstantiated

8. Metric

X = Number of MR transactions in the change control log, transaction is processed for purposes not authorized by the SD.

Y = Number of MR transactions in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.0

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF12_{CC_log_detail}	SD	FF12_{CC_log_detail}_[D]_BCR_ID FF12_{CC_log_detail}_[F]_trn_category

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF12_{CC_log_detail}_[D]_BCR_ID items and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = MR

Y

qualifier

other 1

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Transaction is processed for purposes not authorized by the SD.

X

qualifier

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 47, Intent: "Management reserve may be used for authorized work that is in-scope to the contract, but out of scope to a control account. Management reserve, therefore, may not be applied to completed work packages, except to compensate for the effect of routine accounting adjustments in accordance with the organization's accounting practices."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.04.01**	(30.01.01) (155)	automated/manual	monthly

5. Attribute

Control of Retroactive Changes

6. Metric Intent

This metric confirms that retroactive changes are appropriate and limited to improving BL integrity and the accuracy of performance measurement data. This metric identifies the count of occurrence for incomplete WP where the BCWSi is < $0 and not discussed in IPMR F5.

7. Metric Short Description

BCWSi < 0 unsubstantiated

8. Metric

X = Number of WP WBSs with BCWSi < 0 in the EVMS cost tool, where changes are not discussed in IPMR F5 or not consistent with the SD.

Y = Number of WP WBSs with BCWSi < 0 in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	IPMR F5 SD	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[K]_inc_BCWS_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[K]_inc_BCWS_dollars < 0
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Changes are not discussed in IPMR F5 or not consistent with the SD.

Determine if X or X/Y exceeds the threshold.

Y

qualifier

WBS type

other 1

other 2

X

qualifier

operation

15. Reference(s)

Page 49, Management Value: " Retroactive changes to the baseline may mask variance trends and prevent use of the performance data to project estimates of cost and schedule at completion."

Page 49, Intent: "Control retroactive adjustments (including those in the current period), making only routine accounting adjustments, definitization of contract actions, rate changes, and economic price adjustments, customer-approved changes, or data entry corrections. Adjustments resulting from definitization of contract actions should be limited to affected work scope budgets. Changes that would arbitrarily eliminate existing cost and schedule variance should not be made. Rate changes and economic price adjustments are normal exceptions. The cumulative values for the budgeted cost for work scheduled and budgeted cost for work performed are not adjusted for routine direct or indirect cost rate increases or decreases. This is necessary to ensure baseline integrity and accuracy of performance measurement data. Retroactive budget and/or performance adjustments may delay visibility of overall project variance from plan, thus reducing the alternatives available to managers for project redirection or termination."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.04.02**	(30.01.02) (156)	automated/manual	monthly

5. Attribute

Control of Retroactive Changes

6. Metric Intent

This metric confirms that retroactive changes are appropriate and limited to improving BL integrity and the accuracy of performance measurement data. This metric identifies the count of occurrence for incomplete WP where the BCWPi is < $0 and not discussed in IPMR F5.

7. Metric Short Description

BCWPi < 0 unsubstantiated

8. Metric

X = Number of WP WBSs with BCWPi < 0 in the EVMS cost tool, where changes are not discussed in IPMR F5 or not consistent with the SD.

Y = Number of WP WBSs with BCWPi < 0 in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	IPMR F5 SD	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[L]_inc_BCWP_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[L]_inc_BCWP_dollars < 0
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Changes are not discussed in IPMR F5 or not consistent with the SD.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
other 1
other 2

X
qualifier
operation

15. Reference(s)

Page 49, Management Value: " Retroactive changes to the baseline may mask variance trends and prevent use of the performance data to project estimates of cost and schedule at completion."

Page 49, Intent: "Control retroactive adjustments (including those in the current period), making only routine accounting adjustments, definitization of contract actions, rate changes, and economic price adjustments, customer-approved changes, or data entry corrections. Adjustments resulting from definitization of contract actions should be limited to affected work scope budgets. Changes that would arbitrarily eliminate existing cost and schedule variance should not be made. Rate changes and economic price adjustments are normal exceptions. The cumulative values for the budgeted cost for work scheduled and budgeted cost for work performed are not adjusted for routine direct or indirect cost rate increases or decreases. This is necessary to ensure baseline integrity and accuracy of performance measurement data. Retroactive budget and/or performance adjustments may delay visibility of overall project variance from plan, thus reducing the alternatives available to managers for project redirection or termination."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.04.03**	(30.01.03) (157)	automated/manual	monthly

5. Attribute

Control of Retroactive Changes

6. Metric Intent

This metric confirms that retroactive changes are appropriate and limited to improving BL integrity and the accuracy of performance measurement data. This metric identifies the count of occurrence for incomplete WP where the ACWPi is < $0 and not discussed in IPMR F5.

7. Metric Short Description

ACWPi < 0 unsubstantiated

8. Metric

X = Number of WP WBSs with ACWPi < 0 in the EVMS cost tool, where changes are not discussed in IPMR F5 or not consistent with the SD.

Y = Number of WP WBSs with ACWPi < 0 in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.9

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	IPMR F5 SD	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[G]_WBS_type FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[M]_inc_ACWP_dollars < 0
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- Changes are not discussed in IPMR F5 or not consistent with the SD.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
other 1
other 2

X
qualifier
operation

15. Reference(s)

Page 49, Management Value: " Retroactive changes to the baseline may mask variance trends and prevent use of the performance data to project estimates of cost and schedule at completion."

Page 49, Intent: "Control retroactive adjustments (including those in the current period), making only routine accounting adjustments, definitization of contract actions, rate changes, and economic price adjustments, customer-approved changes, or data entry corrections. Adjustments resulting from definitization of contract actions should be limited to affected work scope budgets. Changes that would arbitrarily eliminate existing cost and schedule variance should not be made. Rate changes and economic price adjustments are normal exceptions. The cumulative values for the budgeted cost for work scheduled and budgeted cost for work performed are not adjusted for routine direct or indirect cost rate increases or decreases. This is necessary to ensure baseline integrity and accuracy of performance measurement data. Retroactive budget and/or performance adjustments may delay visibility of overall project variance from plan, thus reducing the alternatives available to managers for project redirection or termination."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.05.01**	(31.01.01) (158)	automated	monthly

5. Attribute

Preventing Unauthorized Revisions to the Contract Budget Base (CBB)/Project Budget Base (PBB)

6. Metric Intent

This metric confirms that the project budget is revised through authorization from the customer. This metric identifies where there is a difference between the current period CBB log value and the two prior months CBB log values, and where there is a difference between the IPMR F1 CCB value and the current period CBB log value.

7. Metric Short Description

CBB log, current <> prior <> 2 prior

8. Metric

X =
1. Current reporting month CBB log <> prior reporting month CBB log plus changes or
2. Prior reporting month CBB log <> 2 prior reporting month CBB log plus changes.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.1

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[Y]_F1_6_c_CBB
FF11_{CC_log}	FF12_{CC_log_detail}_[F]_trn_category
FF12_{CC_log_detail}	FF12_{CC_log_detail}_[I]_credit_dollars
CPP-1_FF07_{IPMR_header}	FF12_{CC_log_detail}_[K]_debit_dollars
CPP-1_FF11_{CC_log}	CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB
CPP-1_FF12_{CC_log_detail}	CPP-1_FF12_{CC_log_detail}_[F]_trn_category
CPP-2_FF07_{IPMR_header}	CPP-1_FF12_{CC_log_detail}_[I]_credit_dollars
CPP-2_FF11_{CC_log}	CPP-1_FF12_{CC_log_detail}_[K]_debit_dollars
CPP-2_FF12_{CC_log_detail}	CPP-2_FF07_{IPMR_header}_[Y]_F1_6_c_CBB
	CPP-2_FF12_{CC_log_detail}_[F]_trn_category
	CPP-2_FF12_{CC_log_detail}_[I]_credit_dollars
	CPP-2_FF12_{CC_log_detail}_[K]_debit_dollars

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Sum flagged items based on the following operation(s).

- FF07_{IPMR_header}_[Y]_F1_6_c_CBB <> CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB + ((FF12_{CC_log_detail}_[I]_credit_dollars + FF12_{CC_log_detail}_[K]_debit_dollars) where FF12_{CC_log_detail}_[F]_trn_category = DB or UB or MR)
  OR
  CPP-1_FF07_{IPMR_header}_[Y]_F1_6_c_CBB <> CPP-2_FF07_{IPMR_header}_[Y]_F1_6_c_CBB + ((CPP-1_FF12_{CC_log_detail}_[I]_credit_dollars + CPP-1_FF12_{CC_log_detail}_[K]_debit_dollars) where CPP-1_FF12_{CC_log_detail}_[F]_trn_category = DB or UB or MR)

Determine if X or X/Y exceeds the threshold.

x
qualifier
operation

15. Reference(s)

Page 51, Intent: "Prevent unauthorized revisions to the performance measurement baseline. Any changes to the project must be approved and implemented following the baseline management control process. This control precludes the inadvertent implementation of a budget baseline greater than the project budget. When the performance budget or schedule objectives exceed the project plan and are recognized in the performance measurement baseline, it is identified as an over-target baseline (OTB)....When the organization and customer project managers are satisfied that the new baseline represents a reasonable plan for completing the contract, the new baseline becomes the basis for future performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.05.02**	(31.01.02) (159)	automated/manual	monthly

5. Attribute

Preventing Unauthorized Revisions to the Contract Budget Base (CBB)/Project Budget Base (PBB)

6. Metric Intent

This metric confirms that the project budget is revised through authorization from the customer. This metric identifies where there is a difference between the TAB value and the CBB value, and if so, whether there is a documented approval from the customer to proceed with the implementation of the OTB value.

7. Metric Short Description

OTB not approved by DOE

I H

8. Metric

X = Number of TAB minus CBB <> 0 in the IPMR F1, where OTB has not been approved by DOE.

Y = Number of TAB minus CBB <> 0 in the IPMR F1.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1000		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF07_{IPMR_header}	OTB approval document	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[Y]_F1_6_c_CBB FF07_{IPMR_header}_[AI]_F3_5_f_TAB

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF07_{IPMR_header}_[B]_CPP_status_date items and, if identified, with the following characteristics.

- FF07_{IPMR_header}_[AI]_F3_5_f_TAB - FF07_{IPMR_header}_[Y]_F1_6_c_CBB <> 0

Y
qualifier
other 1

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- OTB has not been approved by DOE.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 51, Intent: "Prevent unauthorized revisions to the performance measurement baseline. Any changes to the project must be approved and implemented following the baseline management control process. This control precludes the inadvertent implementation of a budget baseline greater than the project budget. When the performance budget or schedule objectives exceed the project plan and are recognized in the performance measurement baseline, it is identified as an over-target baseline (OTB)....When the organization and customer project managers are satisfied that the new baseline represents a reasonable plan for completing the contract, the new baseline becomes the basis for future performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.05.03**	(31.01.03) (160)	automated/manual	monthly

5. Attribute

Preventing Unauthorized Revisions to the Contract Budget Base (CBB)/Project Budget Base (PBB)

6. Metric Intent

This metric confirms that the project budget is revised through authorization from the customer. This metric verifies that the customer approved OTB value is appropriately recorded in the CBB log.

7. Metric Short Description

change implemented prior DOE authorization

8. Metric

X = Number of changes in the change control log, where change is not supported by a DOE authorization document approved prior to implementation.
Consider authorizations not recorded in the change control log.

Y = Number of changes in the change control log.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.1

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF12_{CC_log_detail}	FF11_{CC_log}	FF11_{CC_log}_[C]_BCR_ID
FF11_{CC_log}	DOE authorization document	FF11_{CC_log}_[D]_approved_date
		FF11_{CC_log}_[F]_implementation_date
		FF12_{CC_log_detail}_[D]_BCR_ID
		FF12_{CC_log_detail}_[F]_trn_category

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF12_{CC_log_detail}_[D]_BCR_ID
FF11_{CC_log}_[C]_BCR_ID items and, if identified, with the following characteristics.

- FF12_{CC_log_detail}_[F]_trn_category = DB or UB or MR
- FF11_{CC_log}_[D]_approved_date <listing>
- FF11_{CC_log}_[F]_implementation_date <listing>

Y
qualifier
other 1
other 2
other 3

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- FF11_{CC_log}_[F]_implementation_date < DOE authorization approval date.

X
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 51, Intent: "Prevent unauthorized revisions to the performance measurement baseline. Any changes to the project must be approved and implemented following the baseline management control process. This control precludes the inadvertent implementation of a budget baseline greater than the project budget. When the performance budget or schedule objectives exceed the project plan and are recognized in the performance measurement baseline, it is identified as an over-target baseline (OTB)....When the organization and customer project managers are satisfied that the new baseline represents a reasonable plan for completing the contract, the new baseline becomes the basis for future performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
G	**G.06.01**	(08.03.01) (161)	automated/manual verification	monthly

5. Attribute

Over Target Baseline (OTB)/Over Target Schedule (OTS) Authorization

6. Metric Intent

This metric confirms that if an OTB/OTS has been approved, the PMB reflects the TAB value. This metric assesses the existence of an OTB/OTS, whether the appropriate approval was obtained by the DOE, whether an OTB/OTS is reported correctly in IPMR F1, F3, and F5, and whether the authorized dollar value equals the OTB dollar value.

7. Metric Short Description

OTB unsubstantiated

a A

8. Metric

X = IPMR F1 TAB <> IPMR F1 CBB.
If not equal,
a. Verify if OTB is approved,
b. Verify if OTB is appropriately reported in IPMR F1, F3, and F5, or
c. Verify if authorization value = OTB value.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	1.2

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header}	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[U]_F1_5_i_OTB_date FF07_{IPMR_header}_[Y]_F1_6_c_CBB FF07_{IPMR_header}_[AI]_F3_5_f_TAB

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Identify FF07_{IPMR_header}_[B]_CPP_status_date and, if identified, with the following characteristics.

Sum flagged items based on the following operation(s).

- FF07_{IPMR_header}_[AI]_F3_5_f_TAB <> FF07_{IPMR_header}_[Y]_F1_6_c_CBB

Conduct the following manual operation(s).

- FF07_{IPMR_header}_[U]_F1_5_i_OTB_date does not a valid date, OTB was not appropriately approved, OTB was not reported correctly in IPMR F1, F3, or F5, or OTB authorization amount does not equal to the OTB value.

Determine if X or X/Y exceeds the threshold.

X
qualifier
qualifier
operation
manual
operation

15. Reference(s)

Page 16, Intent: "During the life of a project, situations may arise whereby available budgets for the remaining work are insufficient to ensure valid performance measurement. Under these circumstances, a requirement may exist for the total budget allocated to work to exceed the recognized Contract Budget Base (CBB). The resulting value is referred to as an Over-Target Baseline (OTB). There may also be situations where the estimated completion date extends beyond the contract completion date. Under some circumstances, it may be prudent to extend the planned completion date beyond the contractual period of performance. The result of this extension is referred to as an Over-Target Schedule (OTS). When the contractor and customer project managers are satisfied that the new baseline represents a reasonable plan for completing the contract, the new baseline becomes the basis for future performance measurement."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.01.01**	(21.01.01) (162)	automated	monthly

5. Attribute

Recording Actual Material Costs

6. Metric Intent

This metric confirms that material actual costs are recorded on the same basis in which budgets are planned and performance is claimed. This metric identifies the count of occurrences where ACWPc is > $0 and BCWPc <= $0 for the CA or WP material EOC at the level of charging.

7. Metric Short Description

A without P (cumulative) discrete material

a A

8. Metric

X = $ total of the discrete material WP WBS ACWPc in the EVMS cost tool, where ACWPc > 0 and BCWPc <= 0.

Y = $ total of the discrete material WP WBS ACWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Y
qualifier
WBS type
EVT
EOC
sum

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[E]_EOC = material
- Sum abs(FF03_{cost}_[M]_ACWPc)

Determine X items, a subset of Y, based on the following.

X
qualifier
other 1
other 2
qualifier
operation

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_ACWPc > 0
- FF03_{cost}_[L]_BCWPc <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Management Value: "The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections.

Page 35, Typical Attribute(s): "The material system needs to account for various methods of charging material cost from inventory in accordance with cost accounting standards inventory costing methods; i.e., First-In, First-Out (FIFO); moving average; weighted average; standard cost; and Last-In, First-Out (LIFO). Identify accountability for all material purchased for the program including material issues to control accounts, return of unused material, scrap quantity and disposition, and residual inventory."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. Re-ID'ed from 21.01.02 to 20.01.01. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.01.02**	(21.01.02) (163)	automated	monthly

5. Attribute

Recording Actual Material Costs

6. Metric Intent

This metric confirms that material actual costs are recorded on the same basis in which budgets are planned and performance is claimed. This metric identifies the count of occurrences where BCWPc > $0 and ACWPc <= $0 for the CA or WP material EOC at the level of charging.

7. Metric Short Description

P without A (cumulative) discrete material

a A

8. Metric

X = $ total of the discrete material WP WBS BCWPc in the EVMS cost tool, where BCWPc > 0 and ACWPc <= 0.

Y = $ total of the discrete material WP WBS BCWPc in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_ACWPc

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[E]_EOC = material
- Sum abs(FF03_{cost}_[L]_BCWPc)

Y
qualifier
WBS type
EVT
EOC
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[L]_BCWPc > 0
- FF03_{cost}_[M]_ACWPc <= 0

X
qualifier
other 1
other 2
qualifier

Sum flagged items based on the following operation(s).

- FF03_{cost}_[L]_BCWPc

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Management Value: "The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections.

Page 35, Typical Attribute(s): "The material system needs to account for various methods of charging material cost from inventory in accordance with cost accounting standards inventory costing methods; i.e., First-In, First-Out (FIFO); moving average; weighted average; standard cost; and Last-In, First-Out (LIFO). Identify accountability for all material purchased for the program including material issues to control accounts, return of unused material, scrap quantity and disposition, and residual inventory."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. Re-ID'ed from 21.01.01 to 20.01.02. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.01.03**	(21.01.03) (164)	automated	monthly

5. Attribute

Recording Actual Material Costs

6. Metric Intent

This metric confirms that material actual costs are recorded on the same basis in which budgets are planned and performance is claimed. This metric identifies the count of occurrences where BCWPi > $0 and ACWPi <= $0 for the CA or WP material EOC at the level of charging.

7. Metric Short Description

P without A (incremental) discrete material

a A

8. Metric

X = $ total of the discrete material WP WBS BCWPi in the EVMS cost tool, where BCWPi > 0 and ACWPi <= 0.

Y = $ total of the discrete material WP WBS BCWPi in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[E]_EOC = material
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- Sum abs(FF03_{cost}_[L]_inc_BCWP_dollars)

Y
qualifier
WBS type
EVT
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[L]_inc_BCWP_dollars > 0
- FF03_{cost}_[M]_inc_ACWP_dollars <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[L]_inc_BCWP_dollars

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Management Value: "The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections.

Page 35, Typical Attribute(s): "The material system needs to account for various methods of charging material cost from inventory in accordance with cost accounting standards inventory costing methods; i.e., First-In, First-Out (FIFO); moving average; weighted average; standard cost; and Last-In, First-Out (LIFO). Identify accountability for all material purchased for the program including material issues to control accounts, return of unused material, scrap quantity and disposition, and residual inventory."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.01.04**	(21.01.04) (165)	automated	monthly

5. Attribute

Recording Actual Material Costs

6. Metric Intent

This metric confirms that material actual costs are recorded on the same basis in which budgets are planned and performance is claimed. This metric identifies the count of occurrences where ACWPi > $0 and BCWPi <= $0 for the CA or WP material EOC at the level of charging.

7. Metric Short Description

A without P (incremental) discrete material

a A

8. Metric

X = $ total of the discrete material WP WBS ACWPi in the EVMS cost tool, where ACWPi > 0 and BCWPi <= 0.

Y = $ total of the discrete material WP WBS ACWPi in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1.0%		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[E]_EOC = material
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- Sum abs(FF03_{cost}_[M]_inc_ACWP_dollars)

Y
qualifier
WBS type
EVT
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_inc_ACWP_dollars > 0
- FF03_{cost}_[L]_inc_BCWP_dollars <= 0

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_inc_ACWP_dollars

X
qualifier
other 1
other 2
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Management Value: "The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections.

Page 35, Typical Attribute(s): "The material system needs to account for various methods of charging material cost from inventory in accordance with cost accounting standards inventory costing methods; i.e., First-In, First-Out (FIFO); moving average; weighted average; standard cost; and Last-In, First-Out (LIFO). Identify accountability for all material purchased for the program including material issues to control accounts, return of unused material, scrap quantity and disposition, and residual inventory."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.01.05**	(21.01.05) (166)	automated	monthly

5. Attribute

Recording Actual Material Costs

6. Metric Intent

This metric confirms that material actual costs are recorded on the same basis in which budgets are planned and performance is claimed. This metric identifies the count of occurrences where ACWPi <> $0 and BCWPc is equal to BAC and BCWPi <= $0 for the CA or WP material EOC at the level of charging.

7. Metric Short Description

A without P (incremental) discrete material completed

a A

8. Metric

X = $ total of the complete discrete material WP WBS abs(ACWPi) in the EVMS cost tool, where ACWPi <> 0 and BCWPi <= 0.

Y = $ total of the complete discrete material WP WBS abs(ACWPi) in the EVMS cost tool.
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
1000		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_DB FF03_{cost}_[L]_inc_BCWP_dollars FF03_{cost}_[L]_BCWPc FF03_{cost}_[M]_inc_ACWP_dollars

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Determine Y items based on the following.

Sum FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[J]_EV_method <> A or J or K or NA
- FF03_{cost}_[E]_EOC = material
- FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- Sum abs(FF03_{cost}_[M]_inc_ACWP_dollars)

Y
qualifier
WBS type
EVT
EOC
other 1
sum

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[M]_inc_ACWP_dollars <> 0
- FF03_{cost}_[L]_inc_BCWP_dollars <= 0
- FF03_{cost}_[L]_BCWPc = FF03_{cost}_[K]_DB

Sum flagged items based on the following operation(s).

- abs(FF03_{cost}_[M]_inc_ACWP_dollars)

X
qualifier
other 1
other 2
other 3
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Management Value: "The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections.

Page 35, Typical Attribute(s): "The material system needs to account for various methods of charging material cost from inventory in accordance with cost accounting standards inventory costing methods; i.e., First-In, First-Out (FIFO); moving average; weighted average; standard cost; and Last-In, First-Out (LIFO). Identify accountability for all material purchased for the program including material issues to control accounts, return of unused material, scrap quantity and disposition, and residual inventory."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.02.01**	(21.02.01) (167)	automated/manual	monthly

5. Attribute

Material Performance

6. Metric Intent

This metric confirms that HDV-CI material performance, BCWP, is recorded either upon receipt of material but no earlier, issue from inventory, or the consumption of the material. This metric identifies HDV-CI material listed on the BL IMS which have not been negotiated and have an actual start date.

7. Metric Short Description

HDV-CI not negotiated

8. Metric

X = Number of HDV-CI activities in the BL IMS starting within 6 months from the current period, where work has not been negotiated.

Y = Number of HDV-CI activities in the BL IMS starting within 6 months from the current period.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF23_{HDV-CI} FF04_{schedule}	HDV-CI documents	FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[L]_ES_date FF04_{schedule}_[AD]_HDV_description FF23_{HDV-CI}_[E]_HDV_description

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF04_{schedule}_[AD]_HDV_description,FF23_{HDV-CI}_[E]_HDV_description items and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL
- FF04_{schedule}_[AD]_HDV_description = FF23_{HDV-CI}_[E]_HDV_description
- FF04_{schedule}_[L]_ES_date < FF04_{schedule}_[B]_CPP_status_date + 6 months

Determine X items, a subset of Y, based on the following.

Manually count flagged items based on the following operation(s).

- HDV-CI work has not been negotiated.

Determine if X or X/Y exceeds the threshold.

Y
qualifier
sch. type
other 1
other 2
X
qualifier
operation

15. Reference(s)

Page 35, Intent: "Material costs must be accurately charged to contract control accounts using recognized, acceptable costing techniques. The need for accurate comparison of material costs to material budgets and earned value requires that the appropriate point of performance measurement for material is established. The generally acceptable points for measuring material progress are:
a. Point of receipt (acceptance),
b. Point of stock (inventory), and
c. Point of issue to work in process (consumption)"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.02.02**	(21.02.02) (168)	automated	monthly

5. Attribute

Material Performance

6. Metric Intent

This metric confirms that HDV-CI material performance, BCWP, is recorded either upon receipt of material but no earlier, issue from inventory, or the consumption of the material. This metric identifies the count of occurrences where HDV-CI material has an erroneous LOE designation.

7. Metric Short Description

HDV-CI LOE

a A

8. Metric

X = Number of incomplete WP WBSs (only EVT LOEs) in the BL IMS, that are HDV-CI.

Y = Number of incomplete WP WBSs (only EVT LOEs) in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF03_{cost}	FF04_{schedule} FF03_{cost}	FF03_{cost}_[G]_WBS_type FF04_{schedule}_[B]_CPP_status_date FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[E]_task_type FF04_{schedule}_[K]_EV_method FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF04_{schedule}_[T]_AS_date FF04_{schedule}_[U]_AF_date FF04_{schedule}_[AC]_is_HDV

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count FF04_{schedule}_[D]_task_ID items and, if identified, with the following characteristics.

qualifier

- FF03_{cost}_[G]_WBS_type = WP

WBS type

- FF04_{schedule}_[C]_schedule_type = BL

sch. type

- IF FF04_{schedule}_[D]_task_ID IS IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = FC
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null
  IF FF04_{schedule}_[D]_task_ID IS NOT IN FF04_{schedule}_[C]_schedule_type = FC
  FROM FF04_{schedule}_[C]_schedule_type = BL
  IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date OR
  FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[L]_ES_date
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[B]_CPP_status_date < FF04_{schedule}_[M]_EF_date

incomplete

- FF04_{schedule}_[K]_EV_method = LOE

EVT

Determine X items, a subset of Y, based on the following.

X

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[AC]_is_HDV = yes

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Intent: "Material costs must be accurately charged to contract control accounts using recognized, acceptable costing techniques. The need for accurate comparison of material costs to material budgets and earned value requires that the appropriate point of performance measurement for material is established. The generally acceptable points for measuring material progress are:
a. Point of receipt (acceptance),
b. Point of stock (inventory), and
c. Point of issue to work in process (consumption)"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.02.03**	(21.02.03) (169)	automated/manual	monthly

5. Attribute

Material Performance

6. Metric Intent

This metric confirms that HDV-CI material performance, BCWP, is recorded either upon receipt of material but no earlier, issue from inventory, or the consumption of the material. This metric identifies the count of occurrences where HDV-CI material activities in the FC IMS having a budget > 10% of the total project material budget are not identified as a material EOC in the cost system.

7. Metric Short Description

material EVT unsubstantiated

a

8. Metric

X = Number of incomplete material WP WBSs in the EVMS cost tool, where abs(SV%) > 10% and EVT is not consistent with the manner in which the material was planned.

Y = Number of incomplete material WP WBSs in the EVMS cost tool.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		1.5

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}	FF03_{cost}_[B]_CPP_status_date FF03_{cost}_[C]_period_date FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF03_{cost}_[G]_WBS_type FF03_{cost}_[J]_EV_method FF03_{cost}_[K]_inc_BCWS_dollars FF03_{cost}_[L]_inc_BCWP_dollars

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF03_{cost}_[D]_WBS items and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP
- FF03_{cost}_[L]_BCWPc < FF03_{cost}_[K]_DB
- FF03_{cost}_[E]_EOC = material

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- IF FF03{cost}_[L]_inc_BCWP_dollars <> 0 THEN abs(FF03_{cost}_[L]_inc_BCWP_dollars / FF03_{cost}_[K]_inc_BCWS_dollars - 1) > 0.1 where FF03_{cost}_[B]_CPP_status_date = FF03_{cost}_[C]_period_date
- FF03_{cost}_[J]_EV_method <listing>

Manually count flagged items based on the following operation(s).

- FF03_{cost}_[J]_EV_method is not consistent with the manner in which the material is planned

Determine if X or X/Y exceeds the threshold.

Y
qualifier
WBS type
incomplete
EOC

X
qualifier
other 1

other 2
qualifier
operation

15. Reference(s)

Page 35, Intent: "Material costs must be accurately charged to contract control accounts using recognized, acceptable costing techniques. The need for accurate comparison of material costs to material budgets and earned value requires that the appropriate point of performance measurement for material is established. The generally acceptable points for measuring material progress are:
a. Point of receipt (acceptance),
b. Point of stock (inventory), and
c. Point of issue to work in process (consumption)"

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.03.01**	(21.03.01) (170)	manual	annually

5. Attribute

Residual Material

6. Metric Intent

This metric confirms that the system can provide for the accountability of all materials purchased to include residual inventory for the project.

7. Metric Short Description

material accounting system lacks accountability

8. Metric

X = The contractor's primary material manager cannot demonstrate their procurement material accounting system tracks accountability for material purchased including residual material.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		0.9

12. Needed Artifacts and Data Elements

X artifact(s)
material accounting system
data presented by contractor

13. Assumptions

14. Instructions

Conduct the following manual operation(s).

- The contractor's primary material manager cannot demonstrate their procurement material accounting system tracks accountability for material purchased including residual material.

manual

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 35, Intent: "Material accounting systems must adhere to these three characteristics:...
1. The material accounting system provides full accountability for all material (including residual inventory) purchased for the project."

Page 35, Management Value: "Residual inventory provides visibility into excess material for the current deliverables available for replacement of failures in the current project or future projects having similar deliverables."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.04.01**	(21.04.01) (171)	manual	annually

5. Attribute

Material Price/Usage Variance

6. Metric Intent

This metric confirms that the system provides for the determination of material price variance usage. This metric identifies the count of occurrences where CA/WP with material budgets do not provide a valid basis for realistic evaluation of cost variances and realistic EAC projections.

7. Metric Short Description

material price/usage unsubstantiated

8. Metric

X = Number of incomplete CA/WP WBSs with EOC material in the EVMS cost tool, where the CAM cannot demonstrate VAR analysis uses and incorporates material price and usage.

N/A
Conduct at the CA level if ACWP is at the CA WBS level.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		1.2

12. Needed Artifacts and Data Elements

X artifact(s)
variance analysis
data presented by CAM

13. Assumptions

ACWPs are collected at the WP level. If ACWPs are collected at the CA level, test needs to be conducted at CA level.

14. Instructions

Conduct the following manual operation(s).

manual

operation

- The CAM cannot demonstrate variance analysis uses and incorporates material price and usage.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 36, Typical Attribute(s): "Price and usage material analysis where useful.
Price Variance = (Earned Value Unit Price - Actual Unit Price) x Actual Quantity.
Usage Variance = (Earned Value Quantity - Actual Quantity) x Earned Value Unit Price.
Quantity breakouts are most useful on programs procuring multiple items of the same part number, typical for production type contracts."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
H	**H.05.01**	(20.01.01) (172)	manual	annually

5. Attribute

Identification of Unit Costs and Lot Costs

6. Metric Intent

This metric confirms that the EVMS has the capability to provide unit costs, equivalent unit or lot costs in terms of labor, material, other direct, and indirect costs as required by the project. This metric assesses whether the material accounting system identifies recurring and non-recurring costs, unit costs, equivalent unit or lot costs.

7. Metric Short Description

material accounting system unsubstantiated

8. Metric

X = The contractor's material representative cannot demonstrate their material accounting system can identify recurring and non-recurring, unit costs, equivalent unit or lot costs, as required.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		0.8

12. Needed Artifacts and Data Elements

X artifact(s)
material accounting system
data presented by contractor

13. Assumptions

14. Instructions

manual

operation

Conduct the following manual operation(s).

- The contractor's material representative cannot demonstrate their material accounting system can identify recurring and non-recurring, unit costs, equivalent unit or lot costs, as required.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 34, Management Value: "A manufacturing accounting system capable of isolating unit and lot costs in a production environment should allow the flexibility to plan, measure performance, and forecast in a more efficient way when there are multiple projects in the same production line."

Page 34, Intent: "When using equivalent units, or lot costs budgeting, ensure that the accounting system produces actual unit, equivalent unit, or lot costs for purposes of measuring cost performance. Typically this is accomplished through the use of a charge number structure, the manufacturing planning systems, or equivalent capability."

Page 34, Typical Attribute(s): "Enterprise Requirements Planning (ERP) support the identification of unit costs, equivalent unit costs, or lot cost when needed including differentiation of work in process. Expressed in terms of labor, material, other direct cost, indirect cost, as well as distinguishing between recurring (e.g., production) and non-recurring (e.g., design, development, travel, and non-recurring expense) costs.
• Identify unit, equivalent unit, or lot costs by type and amount of material as necessary on production-type efforts."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.03**	(01.04.02) (173)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric confirms that the WBS is arranged in a hierarchy and constructed to allow for clear and logical groupings, including identification of subcontractors. This metric determines if work scope elements listing in the WBS dictionary that are being performed by subcontractors are separately identified using the WBS dictionary and/or technical explanations provided by CAMs during discussions.

7. Metric Short Description

HDV-CI not identified

I

8. Metric

X = Number of WBS dictionary project scope elements performed by a subcontractor in the BL IMS not identified in the WBS dictionary or by the CAM.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule}	subcontractor list	FF01_{WBS}_[C]_WBS
FF01_{WBS}	WBS dictionary	FF01_{WBS}_[D]_title
FF03_{cost}		FF01_{WBS}_[H]_OBS
FF16_{subKor_perf}		FF01_{WBS}_[J]_WBS_narrative
WBS dictionary		FF03_{cost}_[D]_WBS
		FF03_{cost}_[E]_EOC
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[AC]_is_HDV
		FF16_{subKor_perf}_[C]_subcontractor_ID
		FF16_{subKor_perf}_[E]_task_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count
FF04_{schedule}_[G]_WBS,FF01_{WBS}_[C]_WBS,FF03_{cost}_[D]_WBS,(FF04_{schedule}_[D]_task_ID,FF16_{subKor_perf}_[E]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- FF04_{schedule}_[AC]_is_HDV = yes — other 1
- FF01_{WBS}_[D]_title <listing> — other 2
- FF01_{WBS}_[J]_WBS_narrative <listing> — other 3
- FF03_{cost}_[E]_EOC <listing> — other 4
- FF16_{subKor_perf}_[C]_subcontractor_ID <listing> — other 5
- FF01_{WBS}_[H]_OBS <listing> — other 6

Determine X items, a subset of Y, based on the following.

X

Manually count flagged items based on the following operation(s).

qualifier

- WBS dictionary project scope elements performed by a HDV-CI subcontractor, exclusive of the prime contractor, not separately identified.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 4, Intent: "A WBS is a direct representation of the work scope in the project, documenting the hierarchy and description of the tasks to be performed and their relationship to the product deliverables.

Earned Value Management System Guideline Scalability Guide, Process 8: Managing Subcontracted Work Effort, Page 46: "Often, a significant portion of a project is performed by subcontractors. Subcontract arrangements are generally with other companies but may also include other organizational entities within the prime contractor’s company. For this process, the term "subcontractor" also refers to inter-divisional work; i.e., effort performed by another profit center within the prime contractor's company. While purchased material items are off-the-shelf hardware, subcontracts generally involve one or more of the following elements:
• Design and development
• Manufacturing effort

• Requirement to meet a performance specification
• A defined SOW
• Substantial technical, schedule, or cost risk

A subcontract procurement requires more comprehensive management techniques for schedule and technical control than do bill of material (BOM) items. Because of this, the application of EVM to a subcontracted effort can require unique process implementations. From an EVM perspective, a distinction must be made between subcontractors considered to be “major” - those delivering critical, high-risk, or high-dollar items to the project, or “minor” - those that do not meet the definition of a major subcontractor. Major subcontractors are normally expected to provide reports to the project that contain all elements of EV information in support of customer reporting requirements. This includes BCWS, BCWP, ACWP, associated schedule and cost variances, budget at completion, EAC, variances at completion, and analysis of all variances designated as significant. For minor subcontractors, the project is expected to generate this information based on information gathered by the assigned subcontract manager or CAM."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.04**	(02.02.01) (174)	automated/manual	initially & semi-annually to align with horizon planning increments

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric confirms that major subcontractor and/or inter-organizational work efforts are identified and integrated into the prime contractor's OBS. This metric ensures that work scope being performed exclusively by HDV-CI subcontractors or inter-organizations is appropriate and separately identified by activity, WP or CA as applicable, and assigned to the appropriate OBS element(s).

7. Metric Short Description

HDV-CI subcontractor or inter-organization work unsubstantiated

I

8. Metric

X = Number of items, where CAM cannot substantiate work scope being performed exclusively by a HDV-CI subcontractor or inter-organization is appropriate, is separately identified by activity, WP, or CA as applicable, and is assigned to the appropriate OBS element(s).

Y = Number of HDV-CI WBS identifiers in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF04_{schedule} FF01_{WBS} FF03_{cost} FF16_{subKor_perf}	FF04_{schedule} HDV-CI documentation data presented by CAM	FF01_{WBS}_[C]_WBS FF01_{WBS}_[D]_title FF01_{WBS}_[H]_OBS FF01_{WBS}_[J]_WBS_narrative FF03_{cost}_[D]_WBS FF03_{cost}_[E]_EOC FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[G]_WBS FF04_{schedule}_[AC]_is_HDV FF16_{subKor_perf}_[C]_subcontractor_ID FF16_{subKor_perf}_[E]_task_ID

13. Assumptions

14. Instructions

Determine Y items based on the following.

Y

Count
FF04_{schedule}_[G]_WBS,FF01_{WBS}_[C]_WBS,FF03_{cost}_[D]_WBS,(FF04_{schedule}_[D]_task_ID,FF16_{subKor_perf}_[E]_task_ID) items and, if identified, with the following characteristics.

qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- FF04_{schedule}_[AC]_is_HDV = yes — other 1
- FF01_{WBS}_[D]_title <listing> — other 2
- FF01_{WBS}_[J]_WBS_narrative <listing> — other 3
- FF03_{cost}_[E]_EOC <listing> — other 4
- FF16_{subKor_perf}_[C]_subcontractor_ID <listing> — other 5
- FF01_{WBS}_[H]_OBS <listing> — other 6

Determine X items, a subset of Y, based on the following.

X

Manually count flagged items based on the following operation(s).

qualifier

- CAM cannot substantiate work scope being performed exclusively by a HDV-CI subcontractor or inter-organization is appropriate, is separately identified by activity, WP, or CA as applicable, and is assigned to the appropriate OBS element(s). — operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 6, Intent: "The OBS identifies the organization responsible for each segment of work, including subcontracted and inter-organizational effort. The assignment of lower-level work segments to responsible managers should provide key control points for management purposes. When effort is subcontracted, the applicable subcontractor is identified and related to the appropriate WBS element(s) and/or organization charged with acquiring the subcontracted item."

EIA-748D, page 5, section 2.1 (b): "The OBS identifies the organization responsible for each segment of work, including subcontracted and inter-organizational effort. The assignment of lower-level work segments to responsible managers should provide key control points for

management purposes. When effort is subcontracted, the applicable subcontractor is identified and related to the appropriate WBS element(s) and/or organization charged with acquiring the subcontracted item."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.05**	(03.02.01) (175)	automated	monthly

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization, and cost accumulation systems are integrated with each other as appropriate and consider major subcontractor work scope with EVMS flow-down requirements, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the subcontractor IPMR F1 and prime contractor cost system ensures that subcontractor BCWS, BCWP, ACWP, BAC, and EAC information are considered and reconcile to the prime contractor cost system for all subcontractor work scope.

7. Metric Short Description

subcontractor BCWPc, ACWPc, DB, and EAC, BL IMS <> EVMS cost tool

8. Metric

X = Number of incomplete subcontractor WBSs in the BL IMS, where BL IMS BCWSc, BCWPc, ACWPc, DB, and EAC <> EVMS cost tool BCWSc, BCWPc, ACWPc, DB, and EAC.

Y = Number of incomplete subcontractor WBSs in the BL IMS.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%	1000	2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF16_{subKor_perf}	FF03_{cost}	FF03_{cost}_[D]_WBS
FF04_{schedule}	FF16_{subKor_perf}	FF03_{cost}_[K]_BCWSc
		FF03_{cost}_[K]_DB
		FF03_{cost}_[L]_BCWPc
		FF03_{cost}_[M]_ACWPc
		FF03_{cost}_[N]_ETCc
		FF04_{schedule}_[C]_schedule_type
		FF04_{schedule}_[D]_task_ID
		FF04_{schedule}_[E]_task_type
		FF04_{schedule}_[G]_WBS
		FF04_{schedule}_[T]_AS_date
		FF04_{schedule}_[U]_AF_date
		FF16_{subKor_perf}_[E]_task_ID
		FF16_{subKor_perf}_[F]_cum_BCWS
		FF16_{subKor_perf}_[G]_cum_BCWP
		FF16_{subKor_perf}_[H]_cum_ACWP
		FF16_{subKor_perf}_[I]_BAC
		FF16_{subKor_perf}_[J]_EAC

13. Assumptions

WBS WP or PP does not have more than 1 subcontractor.

14. Instructions

Determine Y items based on the following. — Y

Count FF04_{schedule}_[G]_WBS,(FF16_{subKor_perf}_[E]_task_ID,FF04_{schedule}_[D]_task_ID) items and, if identified, with the following characteristics. — qualifier

- FF04_{schedule}_[C]_schedule_type = BL — sch. type
- IF FF04_{schedule}_[E]_task_type = M THEN FF04_{schedule}_[U]_AF_date = null AND FF04_{schedule}_[T]_AS_date = null
  OR
  IF FF04_{schedule}_[E]_task_type <> M THEN FF04_{schedule}_[U]_AF_date = null — **incomplete**
- FF16_{subKor_perf}_[E]_task_ID <> null — other 1

Determine X items, a subset of Y, based on the following. — X

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics. — qualifier

Count flagged items based on the following operation(s). — qualifier

- FF16_{subKor_perf}_[F]_cum_BCWS <> FF03_{cost}_[K]_BCWSc
  OR
  FF16_{subKor_perf}_[G]_cum_BCWP <> FF03_{cost}_[L]_BCWPc
  OR
  FF16_{subKor_perf}_[H]_cum_ACWP <> FF03_{cost}_[M]_ACWPc
  OR
  FF16_{subKor_perf}_[I]_BAC <> FF03_{cost}_[K]_DB
  OR
  FF16_{subKor_perf}_[J]_EAC <> FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc — operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

Page 7 Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements. Examples include cross-references between the statement of work and WBS, the master schedule and performance measurement tasks, and the detail schedules and control account plans."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.06**	(03.02.02) (176)	automated	monthly

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization, and cost accumulation systems are integrated with each other as appropriate and consider major subcontractor work scope, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the subcontractor schedule and prime contractor schedule system (at the activity level) ensures that subcontractor BL start and finish date information align to corresponding prime contractor schedule system FC start and finish date information for all incomplete subcontractor work scope.

7. Metric Short Description

start or finish dates, subcontractor schedule <> BL IMS

8. Metric

X = Number of incomplete subcontractor WBSs in the subcontractor's schedule, where subcontractor schedule start or finish dates <> BL IMS start or finish dates.

Y = Number of incomplete subcontractor WBSs in the subcontractor's schedule.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF16_{subKor_perf}	FF04_{schedule} FF16_{subKor_perf}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF16_{subKor_perf}_[E]_task_ID FF16_{subKor_perf}_[K]_BL_start_date FF16_{subKor_perf}_[L]_BL_finish_date FF16_{subKor_perf}_[P]_actual_finish_date

13. Assumptions

WBS WP or PP does not have more than 1 subcontractor.

14. Instructions

Determine Y items based on the following.

Count FF16_{subKor_perf}_[E]_task_ID items and, if identified, with the following characteristics.

- FF16_{subKor_perf}_[P]_actual_finish_date = null

Y
qualifier
incomplete

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

X
qualifier
sch. type

Count flagged items based on the following operation(s).

- FF16_{subKor_perf}_[K]_BL_start_date <> FF04_{schedule}_[L]_ES_date
  OR
  FF16_{subKor_perf}_[L]_BL_finish_date <> FF04_{schedule}_[M]_EF_date

qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements. Examples include cross-references between the statement of work and WBS, the master schedule and performance measurement tasks, and
the detail schedules and control account plans."

Page 7, Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements."

Page 7, Intent: "The work tasks are assigned to a WBS and OBS and are traceable to the planning and budgeting system and the cost collection system. Establishment of a unique coding structure facilitates the linkage between the planning, scheduling, budgeting, work authorization, cost accumulation, and performance measurement processes."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.07**	(03.02.03) (177)	automated	monthly

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric confirms that the planning, scheduling, budgeting, work authorization, and cost accumulation systems are integrated with each other as appropriate and consider major subcontractor work scope, via common data elements and a common coding structure through the WBS and the OBS at the CA level (at a minimum) through the total project level. This metric with the integration of the subcontractor schedule and prime contractor schedule system (at the activity level) ensures that subcontractor FC start and finish date information align to corresponding prime contractor schedule system FC start and finish date information for all incomplete subcontractor work scope.

7. Metric Short Description

start or finish dates, subcontractor schedule <> FC IMS

8. Metric

X = Number of incomplete subcontractor activities in the subcontractor's schedule, where subcontractor schedule start or finish dates <> FC IMS start or finish dates.

Y = Number of incomplete subcontractor WBSs in the subcontractor's schedule.

9. Max. Threshold	10. Max. Tolerance	11. Weight
5.0%		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF16_{subKor_perf}	FF04_{schedule} FF16_{subKor_perf}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF16_{subKor_perf}_[E]_task_ID FF16_{subKor_perf}_[M]_FC_start_date FF16_{subKor_perf}_[N]_FC_finish_date FF16_{subKor_perf}_[P]_actual_finish_date

13. Assumptions

WBS WP or PP does not have more than 1 subcontractor.

14. Instructions

Determine Y items based on the following.

Count FF16_{subKor_perf}_[E]_task_ID items and, if identified, with the following characteristics.

- FF16_{subKor_perf}_[P]_actual_finish_date = null

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF16_{subKor_perf}_[M]_FC_start_date <> FF04_{schedule}_[L]_ES_date
  OR
  FF16_{subKor_perf}_[N]_FC_finish_date <> FF04_{schedule}_[M]_EF_date

Determine if X or X/Y exceeds the threshold.

Y
qualifier
incomplete

X
qualifier
sch. type
qualifier
operation

15. Reference(s)

Page 7, Intent: "Integrate the technical, schedule, and cost elements of the project through project plans that include schedules, budgets, authorization of work, and accumulation of costs, all consistent with the budget plan."

Page 7 Typical Attribute(s): "Provide a logical framework that links the products of the management processes through common data elements.

Examples include cross-references between the statement of work and WBS, the master schedule and performance measurement tasks, and the detail schedules and control account plans."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
I	**I.02.08**	(06.04.04) (178)	automated/manual verification	initially & semi-annually to align with horizon planning increments

5. Attribute

Subcontractor Integration and Analysis

6. Metric Intent

This metric test confirms the network schedule describes the vertical integration of work, and the consistency of data between various levels of schedules including subcontractor and field level schedules. This metric with the schedule system ensures that there is subcontractor schedule integration points, key handoffs, and deliverables in the prime contractor BL IMS.

7. Metric Short Description

BL IMS missing key subcontractor activities

8. Metric

X = Number of activities (e.g., integration points, key handoffs, or deliverables per negotiated subcontract) in the subcontractor's schedule, not in the prime's BL IMS.

Y = Number of activities (e.g., integration points, key handoffs, or deliverables per negotiated subcontract) in the subcontractor's schedule.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.2

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF16_{subKor_perf}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[D]_task_ID FF04_{schedule}_[L]_ES_date FF04_{schedule}_[M]_EF_date FF16_{subKor_perf}_[E]_task_ID FF16_{subKor_perf}_[K]_BL_start_date FF16_{subKor_perf}_[L]_BL_finish_date

13. Assumptions

14. Instructions

Determine Y items based on the following.

Count FF16_{subKor_perf}_[E]_task_ID items and, if identified, with the following characteristics.

Y qualifier

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[D]_task_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

X qualifier

sch. type

Count flagged items based on the following operation(s).

qualifier

- FF04_{schedule}_[D]_task_ID = null
  OR
  FF16_{subKor_perf}_[K]_BL_start_date <> FF04_{schedule}_[L]_ES_date
  OR
  FF16_{subKor_perf}_[L]_BL_finish_date <> FF04_{schedule}_[M]_EF_date

operation

Conduct the following manual operation(s).

- Verify manually.

manual operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "While no specific scheduling software is required, there must be horizontal and vertical integration of the schedule through the framework of the WBS and OBS."

Page 12, Typical Attribute(s): "...The schedule links key detail work packages and planning packages (or lower-level tasks/activities) with summary activities and milestones."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
J	**J.02.01**	(06.09.01) (179)	automated	initially & semi-annually to align with horizon planning increments

5. Attribute

Risk Integration

6. Metric Intent

This metric confirms that significant and probable risk mitigation steps have been included in the BL IMS and that these steps align with applicable mitigation activities defined in the risk register. This metric identifies high and moderate risk mitigation activities are listed in the risk register not in the BL IMS.

7. Metric Short Description

risks, index <> BL IMS

8. Metric

X = Number of high and moderate risks in risk register, not in the BL IMS.

Y = Number of high and moderate risks in risk register.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF19_{risk}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[AG]_risk_ID FF19_{risk_log}_[C]_risk_ID FF19_{risk_log}_[G]_risk_assessment FF19_{risk_log}_[H]_risk_handling

13. Assumptions

High and moderate risks are red or yellow risk assessments.

14. Instructions

Determine Y items based on the following.

Count FF19_{risk_log}_[C]_risk_ID items and, if identified, with the following characteristics.

- FF19_{risk_log}_[H]_risk_handling = mitigate
- FF19_{risk_log}_[G]_risk_assessment = red or yellow

Y
qualifier
other 1
other 2

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[AG]_risk_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = BL

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AG]_risk_ID <> null

X
qualifier
sch. type
qualifier
operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 11, Intent: "The integrated master schedule must agree with the project objectives, include all key events, and reflect a logical sequence of events, taking into account identified risks and opportunities."

Page 12, Typical Attribute(s): "The schedule network should include risk mitigation activities, as appropriate."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.09.02 to 06.09.01.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
J	**J.02.02**	(06.09.02) (180)	automated	initially & semi-annually to align with horizon planning increments

5. Attribute

Risk Integration

6. Metric Intent

This metric confirms that significant and probable risk mitigation steps have been included in the FC IMS and that these steps align with applicable mitigation activities defined in the risk register. This metric identifies high and moderate risk mitigation activities are listed in the risk register not in the FC IMS.

7. Metric Short Description

risks, index <> FC IMS

8. Metric

X = Number of high and moderate risks in risk register, not in the FC IMS.

Y = Number of high and moderate risks in risk register.

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.8

12. Needed Artifacts and Data Elements

Y artifact(s)	X artifact(s)	FF data elements
FF19_{risk}	FF04_{schedule}	FF04_{schedule}_[C]_schedule_type FF04_{schedule}_[AG]_risk_ID FF19_{risk_log}_[C]_risk_ID FF19_{risk_log}_[G]_risk_assessment FF19_{risk_log}_[H]_risk_handling

13. Assumptions

High and moderate risks are red or yellow risk assessments.

14. Instructions

Determine Y items based on the following.

Count FF19_{risk_log}_[C]_risk_ID items and, if identified, with the following characteristics.

- FF19_{risk_log}_[H]_risk_handling = mitigate
- FF19_{risk_log}_[G]_risk_assessment = red or yellow

Determine X items, a subset of Y, based on the following.

Identify FF04_{schedule}_[AG]_risk_ID and, if identified, with the following characteristics.

- FF04_{schedule}_[C]_schedule_type = FC

Count flagged items based on the following operation(s).

- FF04_{schedule}_[AG]_risk_ID <> null

Determine if X or X/Y exceeds the threshold.

Y
qualifier
other 1
other 2

X
qualifier
sch. type
qualifier
operation

15. Reference(s)

Page 11, Intent: "The integrated master schedule must agree with the project objectives, include all key events, and reflect a logical sequence of events, taking into account identified risks and opportunities."

Page 12, Typical Attribute(s): "The schedule network should include risk mitigation activities, as appropriate."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. Re-ID'ed from 06.09.01 to 06.09.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
J	**J.02.03**	(27.05.01) (181)	automated/manual verification	quarterly

5. Attribute

Risk Integration

6. Metric Intent

This metric confirms that the PM's EACs (worst, most likely, and best cases) are reconcilable with cost data reported to the government. The metric identifies where the most likely EAC value from IPMR F1, block 6c does not match the IPMR EAC value from the IPMR F1 Column 15e.

7. Metric Short Description

most likely EAC unsubstantiated [a]

8. Metric

X =
1. IPMR F1 most likely EAC <> EVMS cost tool EAC for project,
2. IPMR F1 EACs are not risk based, or
3. IPMR F5 does not address difference between IPMR F1 most likely EAC and EVMS cost tool EAC for project.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0	1000	2.8

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF03_{cost}	FF03_{cost}_[D]_WBS
FF07_{IPMR_header}	FF03_{cost}_[G]_WBS_type
FF14_{CAM_VAR}	FF03_{cost}_[M]_ACWPc
FF18_{IPMR_F5}	FF03_{cost}_[N]_ETCc
IPMR F5	FF07_{IPMR_header}_[X]_F1_6_c_EAC_likely
	FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt
	FF14_{CAM_VAR}_[J]_VAC_narrative
	FF18_{IPMR_F5}_[C]_F5_narrative_type
	FF18_{IPMR_F5}_[D]_F5_narrative_text

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

Identify FF03_{cost}_[D]_WBS and, if identified, with the following characteristics.

- FF03_{cost}_[G]_WBS_type = WP or PP

Sum flagged items based on the following operation(s).

- FF03_{cost}_[M]_ACWPc + FF03_{cost}_[N]_ETCc + FF07_{IPMR_header}_[AC]_F1_8_d_UB_bgt <> FF07_{IPMR_header}_[X]_F1_6_c_EAC_likely

Conduct the following manual operation(s).

- If flagged,
  1. EAC is not risk based, or
  2. Difference is not discussed in FF14_{CAM_VAR}_[J]_VAC_narrative and FF18_{IPMR_F5}_[D]_F5_narrative_text where FF18_{IPMR_F5}_[C]_F5_narrative_type = EAC.

Determine if X or X/Y exceeds the threshold.

x
qualifier
other 1
qualifier
operation
manual
operation

15. Reference(s)

Page 44, Typical Attribute(s): "EAC results are communicated to the customer in internal reports and in funding documents."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
J	**J.02.04**	(27.05.02) (182)	automated/manual verification	quarterly

5. Attribute

Risk Integration

6. Metric Intent

This metric confirms that the contractor's estimates of costs at completion are reconcilable with cost data reported to the government. This metric determines whether EACs (worst, most likely, and best cases) are listed on the IPMR F1 for blocks 6.a, 6.b, and 6.c.

7. Metric Short Description

best, likely, and worst case EACs unsubstantiated

a

8. Metric

X =
1. The best, likely, and worst case EACs are not identified in the IPMR F1 or
2. PM does not have rationale to include risk basis for the best, likely, and worst case EACs.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.8

12. Needed Artifacts and Data Elements

X artifact(s)	FF data elements
FF07_{IPMR_header} IPMR F1	FF07_{IPMR_header}_[B]_CPP_status_date FF07_{IPMR_header}_[V]_F1_6_a_EAC_best FF07_{IPMR_header}_[W]_F1_6_b_EAC_worst FF07_{IPMR_header}_[X]_F1_6_c_EAC_likely

13. Assumptions

14. Instructions

Determine X items, a subset of Y, based on the following.

x

Identify FF07_{IPMR_header}_[B]_CPP_status_date and, if identified, with the following characteristics.

qualifier

Count flagged items based on the following operation(s).

qualifier

- FF07_{IPMR_header}_[V]_F1_6_a_EAC_best = null
  OR
  FF07_{IPMR_header}_[W]_F1_6_b_EAC_worst = null
  OR
  FF07_{IPMR_header}_[X]_F1_6_c_EAC_likely = null

operation

Conduct the following manual operation(s).

manual

- 1. The best, likely, and worst case EACs are not identified in the IPMR F1 or
  2. PM does not have rationale to include risk basis for the best, likely, and worst case EACs.

operation

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 44, Typical Attribute(s): "EAC results are communicated to the customer in internal reports and in funding documents."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)		3. Method	4. Frequency
J	**J.02.05**	(27.05.03) (183)	manual	annually

5. Attribute

Risk Integration

6. Metric Intent

This metric confirms that the contractor's estimates of costs at completion are reconcilable with cost data reported to the government. This metric determines whether monthly and comprehensive EAC values and information are consistent with reporting to the government.

7. Metric Short Description

IPMR F1 EACs <> EAC reported to leadership or DOE

8. Metric

X = The monthly EACs in the IPMR F1 and the annual comprehensive EAC are not consistent or cannot be reconciled with the monthly reporting to DOE or contractor's leadership.

N/A

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		2.8

12. Needed Artifacts and Data Elements

X artifact(s)
IPMR F1
monthly performance review documents
annual comprehensive EAC data presented by contractor

13. Assumptions

14. Instructions

manual operation

Conduct the following manual operation(s).

- The monthly PM and CAM EACs and the annual comprehensive EAC are not consistent or cannot be reconciled with the monthly reporting to DOE or contractor's leadership.

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

Page 44, Typical Attribute(s): "EAC results are communicated to the customer in internal reports and in funding documents."

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. See track changes.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 03.01.06 (03.01.06) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

[a]

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Section 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 03.01.07 (03.01.07) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 03.01.08 (03.01.08) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight
	0	

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 06.01.03 (06.01.03) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list. New metric.	2020-02-10	PM-30	2020-02-10	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 06.05.05 (06.05.05) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

[a]

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. Sections 12 and 13.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 06.08.03 (06.08.03) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 06.08.04 (06.08.04) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 10.02.01 (10.02.01) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 10.03.01 (10.03.01) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 10.05.01 (10.05.01) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V03.00	Updated for release. Removed metric.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 10.07.02 (10.07.02) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

a A

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight
0		

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 19.01.02 (19.01.02) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V03.00	Updated for release. Removed metric.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 24.01.02 (24.01.02) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V03.00	Updated for release. Removed metric.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 25.01.05 (25.01.05) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V03.00	Updated for release. Re-ID'ed from 25.01.04 to 25.01.05. Removed metric. Metric moved to 25.01.02.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 25.01.06 (25.01.06) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

Reserved.

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V03.00	Updated for release. Removed metric. Metric moved to 25.01.03.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank

DOE EVMS Metric Specification

1. Process Category	2. Metric ID (new, old)	3. Method	4. Frequency
	reserved 27.02.02 (27.02.02) ()		

5. Attribute

6. Metric Intent

7. Metric Short Description

[a]

8. Metric

9. Max. Threshold	10. Max. Tolerance	11. Weight

12. Needed Artifacts and Data Elements

13. Assumptions

14. Instructions

Determine if X or X/Y exceeds the threshold.

15. Reference(s)

16. Revision Block

rev. no.	description of change and sections affected	date prepared	prepared by	date approved	approved by
V04.00	Updated for release. Removed metric.	2022-01-21	PM-30	2022-01-21	Melvin Frank
V03.00	Updated for release. See itemized revision list.	2020-02-10	PM-30	2020-02-10	Melvin Frank
V02.00	Updated for release. None.	2019-07-31	PM-30	2019-07-31	Melvin Frank
V01.01	Updated through 2019-03-13. Minor corrections.	2019-03-13	PM-30	2019-03-14	Melvin Frank
V01.00	Updated for release. All.	2019-01-31	PM-30	2019-01-31	Melvin Frank