



California ISO

# ADS Update

Overview of ADS Replacement

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# ADS Replacement

## Goal:

- Review High Level Scope
  1. Technology Changes
  2. Functional Enhancements
  3. Modified Features
- Release Plan
  1. Parallel Operation
- Questions?

# ADS Replacement – High level scope

Project Info	Details
Application Software Changes	<p data-bbox="552 454 707 482"><u>Technology</u></p> <ul data-bbox="552 522 1644 658" style="list-style-type: none"><li data-bbox="552 522 1644 551">• Transition to web-based user interface to eliminate the need to install thick client.</li><li data-bbox="552 591 1644 658">• Transition ADS provisioning to the Access and Identity Management (AIM) application including resource level access control via self provisioning.</li></ul> <p data-bbox="552 698 687 726"><u>Functional</u></p> <ul data-bbox="552 766 1676 902" style="list-style-type: none"><li data-bbox="552 766 1676 833">• Display 15 minute schedules, 5 &amp; 15-minute Flex Ramp awards (FRU/FRD) in ADS GUI and will be available via B2B. Details are specified in External BRS.</li><li data-bbox="552 873 1676 902">• Various other functional enhancements (mostly related to user interface)</li></ul>

# ADS Replacement – Technology Changes

Items	Descriptions
<b>CAISO CUI</b>	Port the ADS client from Delphi thick Client to CUI (Common User Interface) while retaining existing functionality, and ensure ADS meets current technology standard
<b>RACL Decommissioning</b>	Decommission the ADS RACL tool functionality and adopt the ACL functionalities from AIM/CSDS
<b>Query Tool</b>	The query tool will continue to exist in ADS but will be limited to 30 days worth of data. Beyond 30 days query data will not be available.

# ADS Replacement – Functional Enhancements

HPQC	Description
51690	Initiate unannounced A/S tests in the market.
41607	RTCD Include NSPIN
41884	<p>Changes to instruction display to include the following:</p> <ul style="list-style-type: none"> <li>• When an ED is ended, the ED should appear in the ADS 'Instructions' tab with clear indication that it has ended. When an ED has changed, the display must show the previous ED with a clear label and what the ED has been changed to with a clear label.</li> <li>• Eliminate duplicate entries in the 'Instructions' tab.</li> </ul>
41622	<p>Changes to Instruction display to include two new columns:</p> <ul style="list-style-type: none"> <li>• Previous Supp: similar to RT Prev DOT, will show last binding Supp.</li> <li>• RT Sup Delta: similar to RT DOT Delta, will show difference between RT Supp. Energy and Previous Supp.</li> </ul>
49331	<p>UI display (Flex Ramp Award):</p> <ul style="list-style-type: none"> <li>• Display RTD binding FRU and FRD ramping awards (separately)</li> <li>• Display FMM binding Energy schedules and bid type</li> <li>• Display FMM binding FRU and FRD ramping awards (separately)</li> </ul> <p>Allow MP to access the data through API</p> <ul style="list-style-type: none"> <li>• RTD binding FRU and FRD ramping awards (separately)</li> <li>• FMM binding energy schedules and bid type, FRU and FRD ramping awards (separately)</li> </ul> <p>Add an Alarm in FMM for energy dispatch</p>

# ADS Replacement – Functional Enhancements

HPQC	Description
49329	Add column “Previous Accept DOT” to account any manual intervention from interchange scheduler.
49330	ADS Report and Pop Up Enhancement <ul style="list-style-type: none"><li>• ADS Message visibility: the table in ADS where these messages are stored, UI to allow Operator to access</li><li>• ADS message pop ups resizing large on the screen</li></ul>
18435	ADS: Allow Participants to Query for Operator Messages
44350	ADS display to support multiple time zone

# ADS Replacement – Modified Features

## Capability:

- Current: 'Expand All Groups' & 'Collapse All Groups' from View Menu as shown below.
- Alternative: User can use sorting capability using multiple column.

The screenshot displays the ADS 6.1.0.0 software interface. The 'View' menu is open, showing several options. The 'Expand All Groups' and 'Collapse All Groups' options are circled in red. The background shows a data table with columns for 'Hourly DOT', 'Exceptional', 'Commitment', 'RT AS', and 'Hourly AS'. A 'Messages' panel on the right shows system logs.

Hourly DOT	Exceptional	Commitment	RT AS	Hourly AS
16:00-17:00		16:15-16:30	16:15-16:30	16:00-17:00
16:00-17:00			16:15-16:30	16:00-17:00
Idle	Idle	Idle	15:43:48	15:01:08

Messages:

- 4:16:53 PM : Received new RT DOT batch DISP-D
- 4:11:34 PM : Received new RT DOT batch DISP-2
- 4:09:58 PM : System Ready.
- 4:11:07 PM : Received new Hourly AS batch DISP
- 4:10:43 PM : Received new Real Time AS batch DI
- 4:10:20 PM : Received new Hourly DOT batch DIS
- 4:09:56 PM : Received new RT DOT batch DISP-D

# ADS Replacement – Modified Features

## Capability:

- Current: 'Group By This Field' & 'Group By Box' from Field Chooser as shown below.
- Alternative: User can use sorting capability using multiple column.

The screenshot displays the ADS 6.1.0.0 software interface. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below the menu bar is a toolbar with various icons. The main area is divided into several sections. On the left, there is a 'Clear All Alarms' button and a table with columns: 'RT DDT', 'Hourly DDT', 'Exceptional', 'Commitment', 'RT AS', and 'Hourly AS'. The table contains data for 'Current Interval', 'Dispatch Interval', 'Received/Status', and 'Filter Resources'. On the right, there is a 'Messages' panel showing a list of timestamps. Below the main table, there are tabs for 'Real Time' and 'Hourly Pre-Dispatch'. The 'Real Time' tab is active, showing a table with columns: 'Valid', 'AGC', 'Resource ID', 'Config ID', 'DDT Type', 'SC ID', 'RT Prev', and 'RT DDT'. A context menu is open over the table, listing options: 'Sort Ascending', 'Sort Descending', 'Clear Sorting', 'Group By This Field', 'Group By Box', 'Footer', 'Group Footers', 'Remove This Column', 'Field Chooser', 'Best Fit', and 'Best Fit (all columns)'. The 'Group By This Field' and 'Group By Box' options are circled in red.

# ADS Replacement – Modified Features

## Capability:

- Current: 'Copy to Clipboard' function as shown below.
- Alternative: User can export the data into Microsoft Excel.

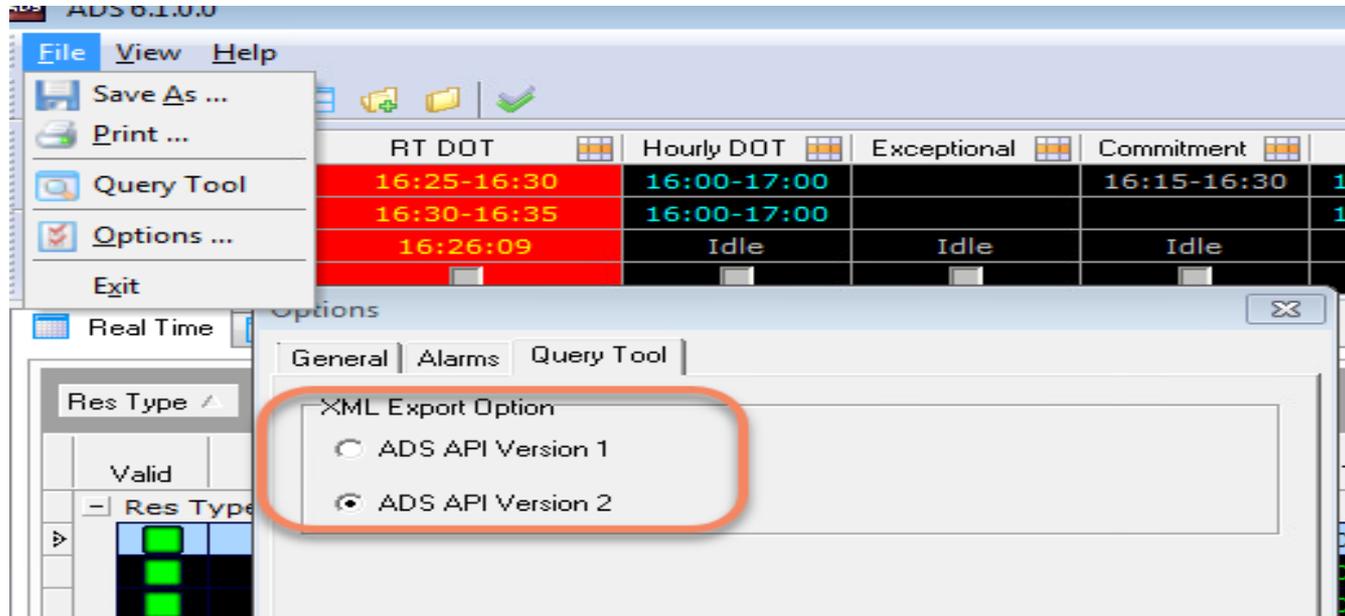
The screenshot displays the ADS 6.1.0.0 application window. The main data table is titled 'Res Type' and contains the following columns: Valid, AGC, Resource ID, Config ID, DOT Type, SC ID, RT Prev DOT, RT DOT, RT DOT Delta, DOT Start Time, and ED Fixed. A context menu is open over the row where Resource ID is '1' and RT DOT is '24.07'. The menu options are 'Copy to clipboard', 'Accept Selected', and 'Decline Selected'.

Valid	AGC	Resource ID	Config ID	DOT Type	SC ID	RT Prev DOT	RT DOT	RT DOT Delta	DOT Start Time	ED Fixed
█	N	R1		DOT		20	20	0	16:22	
█	N	/D1		DOT		0	0	0	16:22	
█	N	R1		DOT		18.85	18.85	0	16:22	
█	N	1		DOT		18	18	0	16:22	
█	N	1		DOT		24.07	24.07	0	16:22	
█	N	1		DOT		23.9	23.9	0	16:22	
█	N	4		DOT		35	35	0	16:22	
█	N	4		DOT		1.96	1.96	0	16:22	
█	N	4		DOT		17.97	17.97	0	16:22	
█	N	4		DOT		8	8	0	16:22	
█	N	42		DOT		1.73	1.73	0	16:22	
█	N	31		DOT		18.59	18.59	0	16:22	

# ADS Replacement – Modified Features

## Capability:

- XML Export Options to export report from Query tool.



# ADS Replacement – Modified Features

## Capability:

- Current: Export to XML file
- Alternative: User can export the data into Microsoft Excel.

The screenshot shows the ADS Query application interface. The main window displays a table with columns: Batch Id, Instruction Id, Received, Interval Start Date, and Interval. The data rows show various batch and instruction IDs with their respective timestamps and dates.

Overlaid on the application is a 'Save Query Result' dialog box. The 'Save in' location is set to 'temp'. The dialog box contains a list of files with columns for Name, Date modified, and Type. The 'Save as type' dropdown menu is open, showing 'XML file' selected and 'CSV file' as an alternative option. The 'File name' field is empty.

Batch Id	Instruction Id	Received	Interval Start Date	Interval
▶ DISP-16470AAI	DISP-16470AAI	08-13-2018 09:01:39	08-13-2018	08-13-2018
DISP-17DB852	DISP-17DB852	08-13-2018 15:06:46	08-13-2018	08-13-2018
DISP-1BEE22D	DISP-1BEE22D	08-13-2018 11:32:08	08-13-2018	08-13-2018
DISP-2167BD3	DISP-2167BD3	08-13-2018 16:11:27	08-13-2018	08-13-2018
DISP-260935C	DISP-260935C	08-13-2018 10:56:37	08-13-2018	08-13-2018
DISP-2A7EC64	DISP-2A7EC64	08-13-2018 15:57:24	08-13-2018	08-13-2018
DISP-2D7C0D4	DISP-2D7C0D4	08-13-2018 13:27:09	08-13-2018	08-13-2018
DISP-2E9B7DA	DISP-2E9B7DA	08-13-2018 16:26:09	08-13-2018	08-13-2018
DISP-3A3A4F9I	DISP-3A3A4F9I	08-13-2018 13:41:50	08-13-2018	08-13-2018

# ADS Replacement – Modified Features

## Capability:

- Current: 'Copy to Clipboard' function as shown below from Instruction display
- Alternative: User can export the data into Microsoft Excel.

Instructions

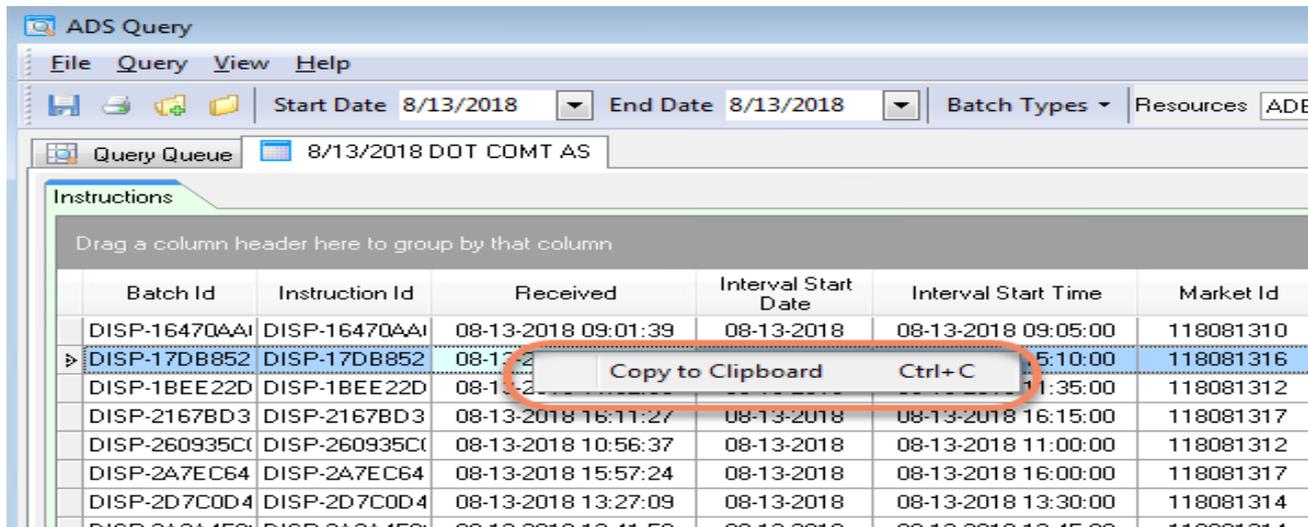
Valid	Instruction Type	Instr MW	Award MW	Self Sched MW	Start Time	End Time	ED Energy Code	Prev Goto	Min Accept	Accept DOT
■	DOT	15.66			16:27			15.67		15.66
■	DOT	15.67			16:22			15.68		15.67
▶	DOT	15.68			15:57			15.72		15.68
■	DOT	15.72			16:07			15.78		15.72
■	DOT	15.78			16:07			15.86		15.78
■	DOT	15.86			16:02			16.07		15.86
■	DOT	16.07			15:57			16.11		16.07
■	DOT	16.11			15:52			16.13		16.11
■	DOT	16.13			15:47			16.04		16.13
■	DOT	16.04			15:42			15.9		16.04
■	DOT	15.9			15:32			15.94		15.9

A "Copy to clipboard" button is overlaid on the table, specifically positioned over the 'Award MW' column of the row with 15.68 MW.

# ADS Replacement – Modified Features

## Capability:

- Current: 'Copy to Clipboard' function as shown below
- Alternative: User can export the data into Microsoft Excel.



The screenshot shows the ADS Query application window. The title bar reads 'ADS Query'. The menu bar includes 'File', 'Query', 'View', and 'Help'. The toolbar contains icons for file operations and filters for 'Start Date' (8/13/2018), 'End Date' (8/13/2018), 'Batch Types', and 'Resources' (ADE). The 'Query Queue' shows a single query: '8/13/2018 DOT COMT AS'. Below the toolbar is the 'Instructions' section with the text 'Drag a column header here to group by that column'. The main area displays a table with the following columns: 'Batch Id', 'Instruction Id', 'Received', 'Interval Start Date', 'Interval Start Time', and 'Market Id'. The row for 'DISP-17DB852' is selected, and a context menu is open over it, showing the option 'Copy to Clipboard' with the keyboard shortcut 'Ctrl+C'.

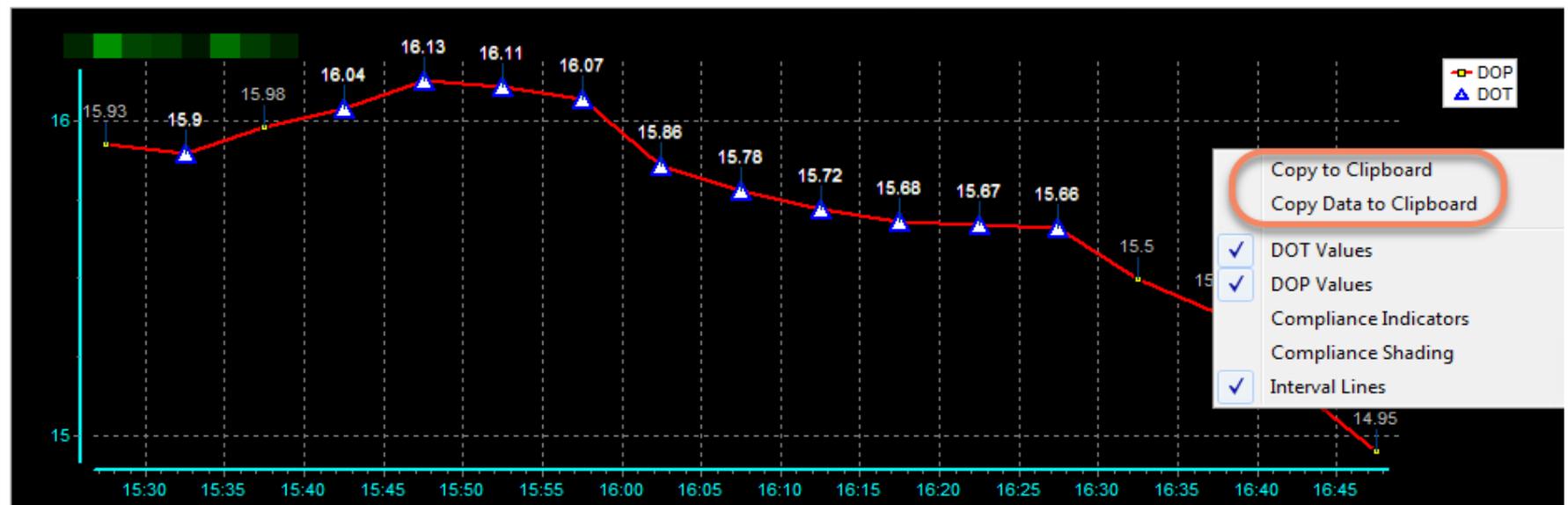
Batch Id	Instruction Id	Received	Interval Start Date	Interval Start Time	Market Id
DISP-16470AAI	DISP-16470AAI	08-13-2018 09:01:39	08-13-2018	08-13-2018 09:05:00	118081310
DISP-17DB852	DISP-17DB852	08-13-2018 09:05:00	08-13-2018	08-13-2018 09:10:00	118081316
DISP-1BEE22D	DISP-1BEE22D	08-13-2018 09:10:00	08-13-2018	08-13-2018 09:15:00	118081312
DISP-2167BD3	DISP-2167BD3	08-13-2018 16:11:27	08-13-2018	08-13-2018 16:15:00	118081317
DISP-260935CI	DISP-260935CI	08-13-2018 10:56:37	08-13-2018	08-13-2018 11:00:00	118081312
DISP-2A7EC64	DISP-2A7EC64	08-13-2018 15:57:24	08-13-2018	08-13-2018 16:00:00	118081317
DISP-2D7C0D4	DISP-2D7C0D4	08-13-2018 13:27:09	08-13-2018	08-13-2018 13:30:00	118081314
DISP-2A7A450	DISP-2A7A450	08-13-2018 13:41:50	08-13-2018	08-13-2018 13:45:00	118081314

# ADS Replacement – Modified Features

## Capability:

- Current: 'Copy to Clipboard' function as shown below from Trajectory Plot
- Alternative: User can export the data into Microsoft Excel.

Trajectory Plot



# ADS Replacement

## Release planning:

- Follow the RUG for release schedule information.
- Planning to support 'Parallel Operation' (~60 days)

Questions & Feedback.