

ELECTRIC POWER RESEARCH INSTITUTE, INC.

EPRI SOURCING AGREEMENT 10007119

BARCELONA SUPERCOMPUTING CENTER

"High Resolution Emissions Inventory and Meteorology Simulations for the Photochemical Study of the Aceca Energy Compound"

This PROJECT AGREEMENT ("Agreement") is entered into as of the Effective Date between ELECTRIC POWER RESEARCH INSTITUTE, INC. ("EPRI"), a non-profit corporation, and Barcelona Supercomputing Center, ("Contractor"). The Agreement consists of this document, the EPRI Terms and Conditions (Attachment A), Addendum to Attachment A, and any other attachment specifically referenced herein.

1. PARTIES

Electric Power Research Institute, Inc. ("EPRI")
3420 Hillview Avenue
P.O. Box 10412
Palo Alto, CA 94303 US

Barcelona Supercomputing Center ("Contractor")
29 Edeficio Nexus II 3a planta
Barcelona 08034 ES

2. STATEMENT OF WORK

The Statement of Work is included in this Agreement as Attachment "B" incorporated into and made an integral part of this Agreement.

3. PERIOD OF PERFORMANCE

The Period of Performance shall begin on February 7., 2017, or the last date of execution, whichever is later (Effective Date), and shall end on June 30, 2017.

4. COST TYPE

This Agreement is Cost Reimbursable ("CRE").

5. FUNDING

5.1 Contractor shall be paid on a time and material basis. **The Contract Cost Limitation (CCL) is €50,001 (Euros)** and consists of the estimated costs shown in Attachment C, Contract Cost Estimate (Form 112).

5.2 COMMITTED FUNDS LIMITATION

EPRI has committed €50,001 for the Work in calendar year 2017. This is the total amount Contractor is authorized to expend annually until notified of additional commitments. Unless otherwise notified by EPRI, the Contractor may carry forward any unexpended Committed Funds into succeeding years.

5.3 INVOICING AND PAYMENT.

All invoices shall reference the Agreement number (10007119) and shall be either electronically transmitted to EPRIinvoices@epri.com or mailed to EPRI at the following address by the 15th of each month. Do not submit to both locations to ensure timely processing of the invoice:

Electric Power Research Institute, Inc.
Attn: Accounts Payable
3420 Hillview Avenue
Palo Alto, CA 94303-1338

5.4 EXCESS COSTS

If Contractor has reason to believe that costs it expects to incur in the performance of the Work in the next succeeding thirty (30) days, when added to all costs previously incurred, will exceed 75% of the cost portion of the Contract Cost Limitation, or if at any time the Contractor has reason to believe that the total cost to perform the Work will be greater or substantially less than the Contract Cost Limitation, the Contractor shall immediately notify EPRI in writing to that effect, giving its revised estimate of the total cost to perform the Work.

If the Contractor is unable to complete the Work for the Contract Cost Limitation, EPRI may either agree by Amendment to increase the Contract Cost Limitation, or delete portions of the Work to allow for completion of the remaining Work within the Contract Cost Limitation.

5.5 CONTRACTOR COST PERFORMANCE REPORT (CCPR) (NOT REQUIRED AT THIS TIME)

6. DELIVERABLES AND DELIVERY SCHEDULE

All Deliverables shall be sent to the EPRI Project Manager unless noted otherwise below:

TECHNICAL REPORT SUMMARY

All deliverables indicated in Attachment B.	Due as indicated in the Statement of Work, or upon the completion or termination of Work, whichever is earlier. Refer to Attachment B for details.
---	--

FINANCIAL REPORTS

Indirect Rate Report	To EPRI Corporate Audit Manager no later than 120 days following Contractor's fiscal year in which the rates are claimed.
----------------------	---

7. TECHNICAL REPORTS

EPRI interim and final reports prepared by the Contractor under this Agreement will be submitted to EPRI in the form of electronic media in accordance with the EPRI format required at the time of the report preparation. The current format is available at: <http://contractor.epri.com> or contact the Project Manager. The electronic files will be virus checked and must be accompanied by a hard copy printout to be used by EPRI for verification purposes only. Failure to comply with report preparation requirements will be corrected by Contractor at its sole expense.

8. SUPPLIER CODE OF CONDUCT

Contractor acknowledges that EPRI, as a non-profit scientific research organization, has core values which include research and business integrity, objectivity, and public benefit. In addition, EPRI is committed to interacting and transacting in an honest, transparent, and fair manner. To the extent applicable for the Work performed under this Agreement, Contractor agrees to abide by the principles and requirements set forth by the EPRI Supplier Code of Conduct ("Code of Conduct"); a copy of the Code of Conduct is available at: <http://contractor.epri.com>.

9. EPRI PROJECT MANAGER

The EPRI Project Manager is Naresh Kumar and she may be reached at 650.855.8758.

10. CONTRACTOR KEY PERSONNEL

Mateo Valero Cortex is the key person for the work performed under this Agreement.

11. NOTICES

All notices or communications required or permitted under this Agreement shall be in writing and personally delivered or sent by registered or certified mail or by facsimile transmission to the address of each party as set forth below, or to such other address as either party may substitute by written notice to the other in the manner expressly provided for herein.

Electric Power Research Institute, Inc.
Attn: Traci Armstrong
942 Corridor Park Blvd.
Knoxville, TN 39732
Phone: 865.218.8052
tarmstrong@epri.com

Barcelona Supercomputing Center
Attn: Mateo Valero Cortes
29 Edeficio Nexus II 3a planta
Barcelona 08034 ES
Phone: (0034) 934134053
Mateo.valero@bsc.es

12. **FINAL RELEASE**

Upon completion of the Work and EPRI's acceptance of the final deliverables or termination of this Agreement, the Contractor will provide a mutually acceptable release to EPRI of all contract claims and obligations except for the provisions cited in Subarticle 9.04, Survival of Attachment A.

13. **EXECUTION**

This Agreement represents the entire agreement between the parties and supersedes all prior and contemporaneous agreements and understandings (oral and written) with respect to the matters covered by this Agreement. Neither party has entered into this Agreement based on representations other than those contained in this Agreement. This Agreement may be amended only by a written agreement signed by all parties. This Agreement may be executed in counter-parts. Each party represents and warrants that the person signing this Agreement on such party's behalf has been duly authorized and empowered to enter into this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

BARCELONA SUPERCOMPUTING CENTER

ELECTRIC POWER RESEARCH INSTITUTE, INC.

By: _____

By: _____

Print Name: _____

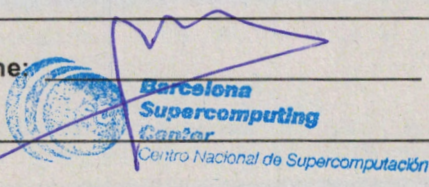
Print Name: Traci Armstrong

Title: _____

Title: Sourcing Lead II

Date: _____

Date: February 13, 2017



SOURCING TERMS AND CONDITIONS**ARTICLE 1 – Definitions**

1.1 "Background Intellectual Property" means a Party's Intellectual Property (including inventions, original works of authorship or trade secrets) existing prior to the commencement of any Work under this Agreement or a Party's Intellectual Property existing during performance of the Work under this Agreement, but owned or developed separate from the Work under this Agreement and without the use of the other Party's Intellectual Property.

1.2 "Change Notice" means a unilateral written notice issued by EPRI to change a term in the Agreement or directing the Contractor to take an action not required by the Agreement.

1.3 "Confidential Information" means any information which is confidential in nature and which does not include information that: (i) is or becomes generally available to the public through no act or omission of the receiving party; (ii) was in the receiving party's lawful possession prior to the disclosure as evidenced by written records and had not been obtained, directly or indirectly, from the disclosing party; (iii) is lawfully disclosed to the receiving party by a third party without restriction on disclosure; or (iv) is independently developed by the receiving party without access or reference to the disclosing parties information as evidenced in written records, or (v) is disclosed by operation of law.

1.4 "Contract Cost Limitation" means the maximum amount that EPRI will be obligated to pay Contractor for the performance of the Work.

1.5 "Deliverables" means the version of Research Results and/or EPRI Materials to be delivered under this Agreement or any amendment thereto.

1.6 "Derivative Works" means any form into which Research Results may be recast, transformed or adapted including the modification, revision, condensation, translation, abridgment and/or expansion of EPRI Materials.

1.7 "EPRI Materials" means, without limitation, all data, documents, machine readable software ("Object Code"), human readable software ("Source Code") (collectively, "Software") owned by EPRI as of the effective date of this Agreement and/or any amendment thereto.

1.8 "Foreground Intellectual Property" means a Party's Intellectual Property developed in the performance of any Work under this Agreement.

1.9 "Intellectual Property" means a Party's patent, copyright, trademark, trade secret or other rights.

1.10 "Permitted Subcontractors" means Contractor's subcontractors, consultants and other EPRI authorized third parties who, in connection with the Work, have executed a non-disclosure agreement with Contractor, which includes requirements for Contractor to protect EPRI Materials and Research Results at a level no less protective than required by this Agreement. Non-disclosure agreement(s) will be made available within thirty (30) days of EPRI's written request.

1.11 "Research Results" means all tangible and intangible results developed, conceived, procured and/or first reduced to practice by Contractor in the course of performing the Work including, without limitation, any real, personal and/or intellectual property rights, Derivative Works, Deliverables, or inventions, discoveries, Software, books, records, reports, notes, computations, analysis, photographs, or samples.

1.12 "Third Party Intellectual Property" means intellectual property owned by a person or entity other than EPRI or the Contractor.

1.13 "Work" means all research, development, and other services required to be performed by Contractor with the Attachment B SOW under this Agreement.

ARTICLE 2 - Fees and Payment

2.1 Fees. Subject to the terms of this Agreement, EPRI will pay Contractor the amounts described in this Agreement. Any fee rates described herein will be fixed for the duration of the Agreement.

2.2 Limitations. EPRI will not be obligated to pay Contractor in excess of the Contract Cost Limitation under any circumstances. Contractor will notify EPRI in writing at any time Contractor has reason to believe its costs will exceed the Contract Cost Limitation.

2.3 Cost Reimbursable. If, and only if, the cost type of this Agreement is designated as Cost Reimbursable, this Article 2.3 will apply.

(a) EPRI will not be obligated to pay Contractor (1) in excess of the Contract Cost Limitation under any circumstances, and/or (2) in excess of the annual Committed Funds Limitation for any calendar year. Payment will be made for costs properly incurred per the following EPRI policy entitled, "Cost Reimbursement Contracts: Allowable and Unallowable Costs", located at www.epri.com. If Contractor does not submit its proposed final indirect rates to EPRI's Audit Department at IndirectRates@epri.com within one hundred and twenty (120) days after the expiration of Contractor's fiscal year, the lower of provisional indirect rates used for billing or actual indirect rates will be considered Contractor's maximum billing rates for reimbursement purposes of indirect cost.

(b) If the Contract Cost Limitation is more than \$50,000, Contractor will notify EPRI in writing whenever it has reason to believe that the costs it expects to incur in the sixty (60) days, when added to costs previously incurred, will exceed seventy-five (75) percent of the Contract Cost Limitation. If Contractor is unable to complete the work for the Contract Cost Limitation, EPRI and Contractor may agree to (i) an increase in the Contract Cost Limitation; (ii) a de-scope of the remaining Work; or (iii) termination of the Agreement pursuant to Subarticle 11.2.

(c) Contractor will invoice EPRI on a monthly basis by the 15th day of each succeeding month. The invoice will indicate Contractor cost sharing (if any). Each invoice will show the period of time covered by the invoice, cumulative expenditures through the current billing period, expenditures for the specific billing period and an itemized statement of direct and indirect costs in at least the same level of detail as set forth in the Form 112 attached hereto as Attachment C.. Contractor's final invoice will be submitted no later than one (1) year after written acceptance of the final Deliverable by EPRI or termination of the Work. After this date, EPRI will be under no further obligation to make payments to Contractor.

2.4 Time and Materials. If, and only if, the cost type of this Agreement is designated as T&M, this Article 2.4 will apply.

(a) The rates specified in the Funding Section are inclusive of all labor charges, indirect costs, and fees and are fixed for the duration of the Agreement. Allowable direct costs will be billed as actual, unburdened costs.

(b) Contractor will provide written documentation of all direct labor hours and costs upon EPRI's request. Contractor will maintain documentation of all costs and will provide written documentation supporting of all Contractor costs upon EPRI's request.

(c) Contractor will invoice EPRI on a monthly basis by the 15th day of each succeeding month. Invoice will indicate Contractor cost sharing (if any) and provide a detailed statement of labor hours incurred along with any EPRI authorized direct charge(s). Contractor's final invoice will be submitted no later than ninety (90) days after written acceptance of the final Deliverable by EPRI or termination of the Work. After this date, EPRI will be under no further obligation to make payments to Contractor.

(d) If the Contract Cost Limitation is more than \$50,000, Contractor will notify EPRI in writing whenever it has reason to believe that the costs it expects to incur in the sixty (60) days, when added to costs previously incurred, will exceed seventy-five (75) percent of the Contract Cost Limitation. If Contractor is unable to complete the work for the Contract Cost Limitation, EPRI and Contractor may agree to (i) an increase in the Contract Cost Limitation; (ii) a de-scope of the remaining Work; or (iii) termination of the Agreement pursuant to Subarticle 11.2.

2.5 Fixed Price. If, and only if, this Agreement is designated as Fixed Price, this Article 2.5 will apply.

(a) Contractor will invoice EPRI upon successful completion and approval by EPRI of the milestones.

(b) EPRI will not have the right to audit Contractor under this Article 2 unless otherwise noted herein.

2.6 Travel. EPRI will reimburse Contractor for all reasonable travel and living expenses incurred by Contractor in performing Work pursuant to this Agreement, provided Contractor proposes and receives prior written consent from EPRI prior to incurring such expenses. Personal car expenses will be reimbursed at the then-current IRS rate per mile. Airfare will be reimbursed up to coach fare basis only. Copies of all travel tickets and related travel expenses are required for reimbursement of travel costs.

2.7 Audit. EPRI may audit Contractor records specifically related to this Agreement no more than once a year, and the latter of once within the third year following final payment or third year after the period of performance end date under this Agreement, at EPRI's expense, and with fifteen (15) days prior written notice. In the event the audit reveals paid unallowable costs, non-reimbursable costs or other overages, EPRI will notify Contractor in writing of such amount(s) and Contractor will within thirty (30) days refund said amount(s) to EPRI. If no refund has been received after thirty (30) days has expired, EPRI may withhold or offset other payables to Contractor under this Agreement or any other Agreement or future Agreement for the amount(s) due, if such amount(s) exceed five percent (5%) of the amount(s) paid by EPRI during the relevant period and Contractor will reimburse EPRI for its costs related to the audit.

2.8 Reports. Contractor will from time to time (as specified in this Agreement or the SOW, or if not so specified, at least monthly) during the term of this Agreement or any extension thereof keep EPRI advised as to Contractor or Contractor's employee's progress in performing the Work hereunder and that Contractor will, as requested by EPRI, prepare written reports with respect thereto, including but not limited to administrative/financial reports as may be set forth in the SOW or required by the EPRI Contact Person.

ARTICLE 3 - Contractor Duties

3.1 General. Contractor will perform the Work on the terms set forth under this Agreement.

3.2 Report Income. Contractor will report as income all compensation received by Contractor pursuant to this Agreement and will pay all self-employment and other applicable taxes thereon in a timely manner. If requested by EPRI, Contractor will provide copies of tax statements.

3.3 Standard of Care. Contractor and Contractor's Employees agree to perform Work with a standard of care, skill and diligence normally provided by a professional person in the performance of services of the type rendered hereunder.

3.4 Safety. Contractor, Contractor's Employees and other individuals working under the direction of the Contractor agree to perform Work in a safe, workmanlike manner and in compliance with all customary safety practices and in accordance with all State, Federal and local laws, ordinances and regulations. If the Work is done on a third party site, Contractor will be responsible for signing and complying with Site Access Agreements with that third party, if any.

3.5 Subcontract and Consultant Flow-Down Requirements. Contractor will ensure that it has a written agreement with each of its subcontractors involved in performing the Work. Except as otherwise authorized in writing by EPRI, the Contractor will assure that the provisions in this Agreement are inserted in all agreements Contractor has with each of its subcontractors involved in performing the Work so that the provisions are applicable to each subcontractor and its employees.

3.6 Additional Duties. Contractor will: (i) promptly notify the EPRI Project Manager ("PM") in writing of any technical, financial, or legal issue which may affect the Work adversely; (ii) promptly notify EPRI Contract Negotiator in writing of any contractual issues, schedule delays or potential or actual legal claims; (iii) assist EPRI, at EPRI's expense, to perfect EPRI's rights in EPRI Materials and/or Research Results; (iv) refer all media inquiries regarding this Agreement to the EPRI PM; (v) utilize the Discovery Disclosure Form located at www.epri.com to provide prompt written notice to EPRI Legal regarding any invention or discovery made, conceived, or first reduced to practice by Contractor or Permitted Subcontractors; (vi) ensure that qualified women, minorities and disabled veteran business enterprises have maximum practicable opportunities for any resulting subcontract or purchasing awards; and (vii) in the event Contractor observes or is asked to do something which the Contractor considers as unethical or illegal, Contractor is required to notify EPRI via its Corporate Responsibility HOTLINE at (800) 826-6762 or any successor number that EPRI provides to Contractor in writing.

ARTICLE 4 - Contractor Changes

4.1 EPRI may stop and/or cancel the Work under this Agreement or reassign its personnel through the issuance of a Change Notice to Contractor. Any changes or modifications to the Scope of Work may only occur through the issuance of an amendment to this Agreement which shall be countersigned by both parties. As appropriate, EPRI will equitably adjust the Contract Cost Limitation. Contractor shall notify EPRI of any circumstance(s) which it becomes aware of that would require the issuance of a Change Order or an amendment. Disputes shall be resolved in accordance with Article 12 (Dispute Resolution).

ARTICLE 5 - License Grant, Restrictions, and Title

5.1 Contractor License. EPRI grants Contractor a limited, revocable, royalty-free, nonexclusive, nontransferable license to reproduce and use the EPRI Materials specifically identified in the Attachment B, SOW, or any amendment to this Agreement, only in the performance of Work under this Agreement and not for the benefit of any third party. Release of EPRI Materials to Contractor is subject to Export Control review and clearance by EPRI. Contractor will have no right to distribute, sublicense, sell, lease, rent, or otherwise commercialize EPRI Materials or EPRI Intellectual Property Rights. Within thirty (30) days of the date of termination or the natural expiration of this Agreement, Contractor agrees to return all copies of the EPRI Materials to EPRI and/or erase all electronic copies from Contractor computers, servers, or hand-held devices. If Contractor erases or destroys the EPRI Materials, Contractor will certify the destruction in writing by a duly authorized representative of Contractor.

5.2 Contractor License Restrictions. Notwithstanding the License granted in Subarticle 5.1, Contractor will not, without EPRI's prior written consent or as otherwise expressly permitted by this Agreement, directly or indirectly:

(a) include any Third Party Intellectual Property within the Research Results or Deliverables without first granting to or obtaining for EPRI a nonexclusive, royalty-free, paid-up, irrevocable, perpetual, world-wide unrestricted license, with the right to grant sublicenses to exercise all rights in, all and any such Third Party Intellectual Property;

(b) disclose to or permit the use of EPRI Materials, EPRI Intellectual Property or Research Results by any third party;

(c) claim any interest in, or take any actions inconsistent with EPRI's interests in EPRI Materials, EPRI's Intellectual Property or the Research Results;

- (d) prepare or have prepared Derivative Works;
- (e) reverse engineer or use any other method to obtain the Source Code version of any EPRI Materials or EPRI's Intellectual Property rights;
- (f) install or use any Source Code which may be provided hereunder on any computer system other than as expressly permitted in the Agreement;
- (g) use any EPRI Materials to create materials the same as or substantially similar to EPRI Materials;
- (h) remove, alter or otherwise obscure any EPRI proprietary rights notices from EPRI Materials, EPRI's Intellectual Property, or Research Results.

5.3 Title. Except for rights expressly granted in this Article, EPRI will retain all right, title and interest in the Research Results, EPRI Materials and EPRI Intellectual Property, and Contractor waives any and all interest or ownership right(s) therein. Further, EPRI reserves all rights and remedies under copyright, trademark, patent, service mark, trade secret, unfair competition and other applicable laws.

(a) EPRI will own, and Contractor hereby assigns, transfers and conveys to EPRI in perpetuity all right, title, and interest in and to Foreground Intellectual Property and Research Results, and all intellectual property rights with respect thereto. Notwithstanding the foregoing, Contractor shall retain sole ownership of all Intellectual Property that was the property of the Contractor prior to the Effective Date or is independently developed or separately funded. EPRI shall not acquire any right, title, or interest in or to any Contractor Intellectual Property unless otherwise expressly provided herein.

(b) Assistance. Contractor agrees to execute such documents, render such assistance, and take such other action as EPRI may request, at EPRI's expense, to apply for, register, perfect, confirm, enforce and protect EPRI's rights in Intellectual Property, Deliverables, and Research Results.

(c) Copyright Notices. Contractor agrees that EPRI may apply copyright notices to all copyrightable items of Foreground Intellectual Property and Research Results, indicating EPRI's ownership of the copyrights in the item, using the following form:

© Copyright 20__ Electric Power Research Institute, Inc., All Rights Reserved". The year in the notice will be the first year of publication or, if unpublished, the year in which the item was completed.

(d) Notice of Inventions and Discoveries. Whenever any invention or discovery is made, conceived or first reduced to practice by Contractor or Contractor's Employees or subcontractors (if any) in the performance of this Agreement, Contractor will promptly furnish EPRI with complete information thereon in a format acceptable to EPRI including, without limitation, a written description thereof giving the date of invention and names of the inventors and others involved in its development.

(e) Agreements with Employees. Except as otherwise authorized in writing by EPRI, Contractor will obtain written agreements with Contractor's Employees (if any) as necessary to effectuate the purposes of this Agreement.

(f) No Claim. Contractor agrees that it will not assert or establish or assist any third party with respect to any claim for intellectual property rights inconsistent with those granted to EPRI herein.

(g) Contractor's Rights. Except as expressly authorized in writing by EPRI, Contractor will have no rights to use, sell, distribute, publish, reproduce, modify, create derivative works of, make, or have made the Foreground Intellectual Property or Research Results.

5.4 Contractor License Grant to EPRI. Contractor agrees that it will not embed any of its Background Intellectual Property or any third-party Intellectual Property into the Research Results or Deliverables developed and delivered under this Agreement. Contractor further agrees that if it determines it is necessary to include its Background Intellectual Property or the Background Intellectual Property of any third party within the Research Results and/or Deliverables, it will contact EPRI's Legal Department for direction before proceeding.

5.5 Computer Programs. Contractor agrees that any computer programs and related software delivered to EPRI under this Agreement will be checked by Contractor to determine if it is free of viruses that are detectable using accepted industry practice at the time of delivery to EPRI. In addition, any such software delivered to other organizations, including but not limited to other EPRI contractors and electric utility companies, will also be checked by Contractor to determine if it is free of such viruses. Contractor will label all software and other electronic media with the date and method used to check for virus contamination and prior to delivery to EPRI or other organizations promptly replace any such software found to contain virus contamination as of that time with the software free of known viruses.

ARTICLE 6 - Property

6.1 Property. No equipment will be purchased with EPRI funds, nor will any improvement, modification or construction of real or personal property be made with EPRI funds unless such purchase or expenditure has been previously and specifically approved in writing by EPRI. Except in unusual circumstances, authorization for such purchases will not be granted. However, any equipment that is purchased pursuant to this Article will be used only for the performance of the Work.

6.2 Title and Insurance. RESERVED

6.3 Identification. RESERVED

ARTICLE 7 - Confidentiality

7.1 Confidential Information. The parties agree that all EPRI Materials, Research Results, and EPRI Intellectual Property comprise Confidential Information. All information considered Confidential Information by Contractor must, prior to disclosure, (i) be labeled as "Confidential" or otherwise clearly identified as confidential, or (ii) if disclosed orally, be identified as confidential at the time of disclosure, and be reduced to writing, marked as "Confidential" and delivered to EPRI within twenty (20) days of such disclosure.

7.2 Protection of Confidential Information. The parties agree to protect each other's Confidential Information (including EPRI Materials) in perpetual confidence at a level no less protective than accorded their own Confidential Information. Disclosure of Confidential Information by Contractor will be strictly limited to Contractor's employees, Permitted Subcontractors, and governmental agencies for regulatory compliance purposes, on a need-to-know basis only, and subject to the execution of a non-disclosure agreement citing industry-wide accepted standards for the protection of Confidential Information. Upon EPRI's request, a copy of this non-disclosure agreement will be promptly provided by Contractor. Either party may disclose Confidential Information of the other party to the extent required by law.

7.3 Protection of Third Party Confidential Information. Contractor agrees to hold Confidential Information of a third party disclosed by EPRI in accordance with the requirements of Subarticle 7.2 above. Notwithstanding the foregoing, Contractor may only disclose such third party Confidential Information to only its employees on a need-to-know basis and subject to terms of confidentiality, which protect the third

party Confidential Information equally as protective as this Agreement. Any disclosures by Contractor to persons other than Contractor's employees will only be permitted with EPRI's prior written consent.

ARTICLE 8 - Representations and Warranties

8.1 EPRI Warranty. EPRI represents and warrants that it has the right and power to enter into this Agreement.

8.2 Contractor Warranty. Contractor represents and warrants it can fulfill its obligations under the Agreement, has the right and power to enter into the terms of this Agreement and the authority to grant the license cited in Subarticle 5.4 without breaching any agreements which Contractor is bound, or infringing on any Third Party Intellectual Property rights. Further, Contractor warrants that EPRI's or its sublicensees' use or distribution of the Research Results and the Work will not infringe on any Third Party Intellectual Property Rights. Contractor warrants that it will comply with present and future applicable federal and state labor and employment laws, including, but not limited to health, safety and environmental laws, regulations and orders. Nothing in this warranty will be construed to limit any rights or remedies otherwise available to EPRI.

8.3 DISCLAIMER OF WARRANTIES. WITHOUT LIMITING THE FOREGOING, CONTRACTOR ACCEPTS THE EPRI MATERIALS "AS IS". EPRI DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS, WHETHER STATUTORY OR IMPLIED, OF NONINFRINGEMENT, TITLE, QUIET ENJOYMENT, ACCURACY, MERCHANTABILITY, FREEDOM FROM MALWARE, OR FITNESS FOR ANY PURPOSE.

ALL DELIVERABLES, MATERIALS, FORECAST, PREDICTIONS AND COMPUTER SIMULATIONS PROVIDED BY BSC TO EPRI ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, SPECIFICALLY IMPLIED WARRANTIES OF SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE.

ARTICLE 9 – Limitation of Liability

9.1 EPRI's LIMITATION OF LIABILITY. EPRI'S LIABILITY TO CONTRACTOR OR ANY THIRD PARTY FOR A CLAIM OF ANY KIND ARISING UNDER OR RELATED TO THIS AGREEMENT, ANY EPRI MATERIALS, RESEARCH RESULTS, OR WORK, WHETHER FOR BREACH OF CONTRACT OR WARRANTY, STRICT LIABILITY, NEGLIGENCE, INFRINGEMENT OR OTHERWISE, WILL NOT EXCEED THE AGGREGATE VALUE OF THE AMOUNTS UNDER THIS AGREEMENT. IN NO EVENT WILL EPRI, ANY SUBSIDIARY, SUPPLIER, OR SUBCONTRACTOR, OF EPRI BE LIABLE FOR AN INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, LOST DATA, WORKSTOPPAGE, COMPUTER FAILURE, OR MALFUNCTION) EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NO ACTION, REGARDLESS OF FORM, ARISING OUT OF THIS AGREEMENT MAY BE BROUGHT BY CONTRACTOR MORE THAN ONE YEAR AFTER THE EVENTS WHICH GIVE RISE TO THE CAUSE OF ACTION OCCURRED. IN NO CASE WILL ANY FUNDER OF EPRI OR ANY PERSON OR ENTITY ACTING ON BEHALF OF THE SAME WILL BE LIABLE TO CONTRACTOR.

CONTRACTOR LIMITATION OF LIABILITY. EXCLUDING CONTRACTOR'S INTELLECTUAL PROPERTY INDEMNIFICATION OBLIGATIONS, CONTRACTOR'S LIABILITY TO EPRI OR ANY THIRD PARTY FOR A CLAIM OF ANY KIND RELATED TO THIS AGREEMENT, ANY CONTRACTOR MATERIALS, RESEARCH RESULTS, OR SERVICES, WHETHER FOR BREACH OF CONTRACT OR WARRANTY, STRICT LIABILITY, NEGLIGENCE OR OTHERWISE, SHALL NOT EXCEED TWO TIMES THE AGGREGATE VALUE OF THE PAID AMOUNT UNDER THIS AGREEMENT. IN NO EVENT WILL CONTRACTOR, ANY SUBSIDIARY, SUPPLIER, OR SUBCONTRACTOR, OF CONTRACTOR BE LIABLE FOR AN INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, LOST DATA, WORKSTOPPAGE, COMPUTER FAILURE, OR MALFUNCTION) EVEN IF ADVISED OF THE POSSIBILITY OF SUCH

DAMAGES. NO ACTION, REGARDLESS OF FORM, ARISING OUT OF THIS AGREEMENT MAY BE BROUGHT BY EPRI MORE THAN ONE YEAR AFTER THE EVENTS WHICH GIVE RISE TO THE CAUSE OF ACTION OCCURRED.

ARTICLE 10 - Indemnification

10.1 Indemnification. Contractor will indemnify, defend and hold EPRI, EPRI funders, and sublicensees of the Research Results (collectively, "Indemnified Party") harmless from and against any and all claims, losses, costs, liabilities and expenses (including reasonable attorneys' fees), arising out of (a) any intellectual property infringement of any Research Results, and (b) Contractor's, or Permitted Subcontractor's, performance under this Agreement provided that: (i) the Indemnified Party gives written notice of any claim to Contractor; (ii) at Contractor's expense, the Indemnified Party provides assistance which Contractor may reasonably request for the defense of the claim; and (iii) Contractor has the right to control the defense or settlement of the claim, provided, however, that the Indemnified Party will have the right to participate in, but not control, any litigation for which indemnification is sought with counsel of its own choosing and at its own expense. If an injunction or order issues restricting the use or distribution of any Research Results, or if EPRI determines that any Research Results may become the subject of a third party intellectual property rights infringement claim, Contractor will, at its option and expense, (i) procure the right to continue using, reproducing, and distributing the Research Results, as applicable; or (ii) replace or modify the Research Results so that they become non-infringing, provided such modification or replacement does not materially alter or affect the use or operation of the Research Results. Without limiting EPRI's remedies, EPRI will be entitled to withhold and off-set payments to Contractor from this or any other Agreement with Contractor to cover potential damages, liabilities, costs, and expenses until such matter is finally resolved.

ARTICLE 11 - Termination

11.1 Termination for Cause. EPRI may, with written notice, terminate this Agreement or any part hereof, as follows: (i) immediately in the event of a breach by Contractor of Article 5 (License Grant, Restrictions, and Title) or Article 7 (Confidentiality); or (ii) immediately upon Contractor's attempt to assign this Agreement without EPRI's prior written approval; or (iii) upon Contractor's failure to cure a breach of this Agreement within thirty (30) days of written notification by EPRI that Contractor is in breach of the Agreement. The Termination for Cause is effective immediately upon receipt of the EPRI notice. Contractor will take all steps necessary to mitigate damages upon receipt of a notice of termination.

11.2 Termination for Convenience. EPRI may terminate this Agreement or any part hereof upon thirty (30) days written notice of termination for any reason or for no reason. As of the effective date of the termination, Contractor will return all EPRI Materials and deliver all Research Results including any works-in-progress within thirty (30) days of receipt of the termination notice. EPRI will reimburse Contractor for all verified allowable costs and EPRI approved non-cancelable commitments incurred prior to the date of receipt by the Contractor of the notice of termination as well as reasonable closeout costs, if any. Total payments to Contractor will not exceed the amount of the Contract Cost Limitation and Contractor will not be entitled to lost profits or consequential damages. Contractor will continue its performance of all non-terminated Work under this Agreement.

11.3 Effects of Termination. In the event this Agreement is terminated for cause pursuant to Subarticle 11.1 or for convenience pursuant to Subarticle 11.2 above, the License granted to Contractor will immediately terminate and Contractor will cease use of EPRI Materials, and within thirty (30) days of termination, Contractor will return all EPRI Materials including any reproductions, uninstall or otherwise permanently delete all EPRI Materials from Contractor's, its subsidiaries and affiliates or Permitted Subcontractor's computer systems, and provide EPRI with a written certification of such action signed by a duly authorized representative of Contractor. Contractor will have no right to receive any goodwill compensation relating to this Agreement, EPRI Materials, any other monies from EPRI, or ownership or any other right to EPRI Materials.

11.4 Survival. The provisions of Article 5 (License Grant, Restrictions, and Title) other than licenses to Contractor, Article 7 (Confidentiality), Article 8 (Representations and Warranties), Article 10 (Indemnification), Article 12 (Dispute Resolution) and Article 13 (Miscellaneous), and Subarticle 2.7 (Audit) will survive the termination of this Agreement.

ARTICLE 12 - Dispute Resolution

12.1 Arbitration. Any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, if it cannot be settled through direct negotiation between the parties, then either party may initiate arbitration proceedings and such dispute shall be finally determined by an arbitration by one arbitrator in London in accordance with the Rules of Arbitration of the London Court of International Arbitration, as amended, which rules are deemed to be incorporated by reference to this clause. The language of the arbitration shall be English. Any award shall be binding and enforceable against the parties in any court of competent jurisdiction, and the parties hereby waive any right to appeal such award on the merits or to challenge the award. Notwithstanding the foregoing agreement to arbitrate, the parties expressly reserve the right to seek provisional relief from any court of competent jurisdiction to preserve their respective rights pending arbitration, and in seeking such relief shall not waive the right of arbitration. Each party shall bear their respective attorneys' costs.

12.2 Expenses. Each party will bear its own expense (including attorneys' fees) incurred in any dispute resolution or court proceeding, or settlement activities unless otherwise agreed by the parties or ordered in the Arbitration award.

ARTICLE 13 - Miscellaneous

13.1 Governing Law. This Agreement will be governed by and construed in accordance with the laws of the State of California, without giving effect to any principles that provide for the application of the law of another jurisdiction.

13.2 Compliance. Contractor shall comply with all laws, rules and regulations including, without limitation, all applicable U.S. and foreign export, anti-bribery, antitrust, tax, privacy, safety, employment and immigration laws and regulations, to the extent they do not conflict with U.S. anti-boycott legislation. The Parties acknowledge and agree that compliance with such laws and regulations may delay or in rare cases prevent the delivery to Contractor of EPRI Materials licensed to Contractor under this Agreement, if any. The Parties agree that access provided by Contractor to the EPRI Materials and Research Results (collectively referred to as "Export Controlled Materials") is Contractor's sole responsibility. This responsibility includes an obligation to ensure that any individual who (i) is specifically excluded from receiving the Export Controlled Materials under applicable regulations, (ii) is not a citizen or permanent resident of the U.S. or Contractor's domiciliary country or (iii) is receiving access outside of the U.S. or Contractor's domiciliary country; is not permitted access to Export Controlled Materials without prior authorization by the relevant government authority(ies). Although EPRI may make an informal assessment of the applicable U.S. export classification for specific Export Controlled Materials, restricted countries and individuals, Contractor acknowledges that this assessment is solely for informational purposes and not for reliance purposes. These obligations shall survive any satisfaction, expiration, termination, or discharge of the Agreement or any other obligations.

13.3 Assignment. Contractor may not assign this Agreement, in whole or in part, whether by contract or operation of law, without EPRI's prior written consent, which will not be unreasonably withheld, and any purported attempt to do so will be considered as null and void. EPRI agrees Contractor may subcontract Work to a Permitted Subcontractor, provided, any subcontracting arrangement will not relieve Contractor of any of its duties or obligations. The terms of this Agreement will bind and inure to the benefit of permitted assigns.

13.4 Waiver. No failure or successive failures on the part of either party, its successors, or assigns, to enforce any covenant or agreement, and no waiver or successive waivers on its or their part of

any condition of this Agreement or amendment will operate as a discharge of such covenant, agreement, or condition, or render the same invalid, or impair the right of either party, its successors and assigns, to enforce the same in the event of any subsequent breach or breaches by the other party, its successors, or assigns.

13.5 Severability. If any provision of this Agreement or any amendment is held to be invalid or unenforceable, the remaining provisions of this Agreement or amendment(s) will remain in full force.

13.6 Independent Contractor. Both parties will perform their obligations hereunder as independent contractors and will be solely responsible for their own financial obligations. This Agreement is not intended to and will not make Contractor an agent or employee of EPRI and Contractor hereby acknowledges and agrees that it is not an agent or employee of EPRI. Nothing contained in this Agreement will be construed to imply a joint venture, partnership or principal and agent relationship between the parties and neither party will have any right, power, or authority to create any obligation, express or implied, on behalf of the other in connection with the performance of this Agreement. Contractor agrees to furnish (or reimburse EPRI for) all tools and materials necessary to accomplish the Work, and will incur all expenses associated with performance, except as expressly provided in this Agreement. Contractor acknowledges that neither Contractor nor Contractor's employees or agents will be eligible for any EPRI employee benefits.

13.7 Commercial Items. Each EPRI Material is a "commercial item," as that term is defined at 48 C.F.R. 2.101. To the extent that any EPRI Material includes software or its related documentation, such software and related documentation constitute "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212, and are provided to be used by or for the U.S. Government only as commercial end items. Any technical data provided with such EPRI Material is commercial technical data as defined in 48 C.F.R. 12.211. Consistent with 48 C.F.R. 12.211 through 12.212, 48 C.F.R. 227.7202-1 through 227.7202-4, and 48 C.F.R. 252.227-7015, all U.S. Government customers acquire the EPRI Material with only those rights set forth in this Agreement.

13.8 Force Majeure. Any delay in the performance of any duties or obligations of either party will not be considered a breach of this Agreement, if such delay is caused by a national labor dispute, shortage of material supply, fire, earthquake, flood, acts of terrorism or any other event beyond the control of such party, provided that such party uses reasonable efforts, under the circumstances, to notify the other party of the circumstances causing the delay and to resume performance as soon as possible.

Insurance. Contractor shall maintain, and ensure any Subcontractors working under this Agreement maintain, insurance issued by insurers acceptable to EPRI of at least \$1,000,000 per occurrence commercial general liability insurance, statutory levels of worker's compensation insurance, adequate employer's liability insurance, and any other additional insurance necessary to protect itself and EPRI from all potential losses that may arise during performance of this Work. If the commercial general liability insurance contains a general aggregate limit, the policy shall be endorsed to state that the general aggregate limit shall apply separately to this Agreement. Each such policy shall provide for severability of interests. Contractor shall provide EPRI with evidence of compliance with all insurance requirements within ten (10) days of the Effective Date of this Agreement.

13.9 Endorsements. Contractor acknowledges that EPRI neither endorses products or services, nor allows the data or other results of the Work to be used as an endorsement. Therefore, Contractor agrees that it will not, whether explicitly or through implication, use EPRI's name, logo, trademarks, the name, title, or statements of EPRI employees, this Agreement, or the results of the Work for advertising or other promotional purposes, raising of capital, recommending investments, or in any way that states or implies endorsement by EPRI. Any exceptions to this subarticle will require the advanced written approval by EPRI's executive in charge of corporate communications, which may be withheld at EPRI's sole discretion.

13.10 Order of Precedence. In the event of a conflict between or among the terms of the Agreement documents, the order of precedence will be: the Sourcing Agreement, the Sourcing Terms and Conditions, any SOW, and then any other attachments to the Agreement in the order presented. If there are multiple Agreement amendments, the most recent amendment will have the highest precedence and the oldest amendment will have the lowest precedence.

13.11 Publicity. Contractor may not issue any publicity releases (including news releases and advertising) relating to this Agreement and the Work performed hereunder without the prior written approval of EPRI's executive in charge of corporate communications. Any inquiry the Contractor receives from news media concerning this Agreement will also be referred to the EPRI's executive in charge of corporate communications for coordination prior to response. Any technical paper, article, publication, or announcement of advances generated in connection with Work performed under this Agreement, during the Term or thereafter, will give credit to EPRI. Nothing contained in this subarticle will be deemed to grant Contractor any license with respect to the results of the Work.

13.12 Additional Obligations. Contractor will maintain complete and accurate information related to the location of project records associated with this Agreement, to include, but not be limited to, EPRI Materials, Research Results, or any other real, personal, and intellectual property, and will allow EPRI, with fifteen (15) days' notice, to do a physical audit of the project records. Contractor will retain Research Results for three years after final payment is received. Contractor will not, without the prior written permission of EPRI, subcontract out any of the Work or substitute or substantially change the participation of any key personnel identified in this Agreement. Contractor will not perform Work on a third party's site without first obtaining from the third party a written waiver and release of claims for direct, indirect, special and/or consequential damages in favor of EPRI.

13.13 Additional Provisions. RESERVED.

ATTACHMENT B

SOURCING STATEMENT OF WORK

EPRI AGREEMENT 10007119

“High Resolution Emissions Inventory and Meteorology Simulations for the Photochemical Study of the Aceca Energy Compound”**Introduction and Background**

The Aceca Energy Compound is located in the town of Villaseca de la Sagra, near the river Tajo in Toledo, Spain, and is comprised of two 400 MW combined cycle natural gas (CCNG) units, one belonging to Iberdrola and the other to Natural Gas Fenosa (NGF). Two older units that were burning fuel oil were retired and are not functioning since 2010.

Iberdrola y GNF support an air quality monitoring network of six monitoring stations measuring concentrations of SO₂, NO, NO₂, CO, O₃, PM₁₀ and PM_{2.5}; there are also two meteorological stations measuring wind speed, wind direction, ambient temperature, vertical temperature, relative humidity, solar radiation, and precipitation. The locations of the monitoring stations were determined when the two fuel oil units I and II were active.

From the regulatory point of view, the directive 2008/50/CE sets several requirements for the location of stationary monitors, including spatial representativeness considerations. The representative area of stationary monitors allows to extend the observed results from the observation point (sampling point) to the area being represented. Given the intrinsic variability of pollutants concentrations within the represented area with respect to measured values at the sampling point, several other criteria have to be met before the observed concentrations are deemed to be representative. However, there is no common method of reference to specify the proper representativeness of stationary monitors and not general scientific agreement on that respect.

In this context, the Work will provide high temporal (1hr) and spatial resolution (up to 1 km) meteorology and emissions inventories needed to support the application of the photochemical model Community Multi-scale Air Quality (CMAQ) in the area surrounding the Aceca Energy Compound. The objective of the Work is to determine the representativeness of the current monitoring stations network around the plant. For that purpose, the meteorological model Weather Research and Forecasting – Advanced Research (WRF-ARW) and the emissions model High Elective Resolution Modelling Emission System (HERMESv2.0) will be used. The resulting archives will be then used by EPRI as inputs for CMAQ photochemical simulations and to draw conclusions for the final report.

The modeling system used in this work incorporates the experience of the Earth Sciences group of the BSC in the development of the air quality system forecast for Spain CALIOPE (<http://www.bsc.es/calioppe/es>). **The highest resolution domain for the Aceca area (1x1 km) and the emissions inventory for that domain will be defined to be suitable for future use and integration in the CALIOPE system, providing a potential decision-making tool for air quality forecasts.**

Objectives

The main objective of this proposal is to run high spatial (up to 1x1 km) and temporal (1hr) resolution meteorological and emissions inventory simulations covering the Aceca area and for years 2012 or 2013, depending on the needs of the study. The simulations will be run using a modeling system that will integrate the meteorological model WRF-ARW and the emissions model system HERMESv2.0.

The results of this Work, that will be carried out by Contractor will be provided to EPRI. The deliverable will be 3D archives in NetCDF format with meteorology and emissions inventory inputs and covering the whole year of the study. The archives will be used by EPRI to run CMAQ photochemical simulations, using the chemical-gas mechanisms CB05-AERO5.

For the purpose of the photochemical simulation, meteorological and emissions inventory archives will be also produced to cover two lower resolution domains of 12x12 and 4x4 resolution, respectively. These domains will provide the needed boundary and initial conditions for the 1x1 km resolution domain object of the study. The domain of 12x12 km will cover a Europe and the 4x4 km resolution domain will cover the Iberian Peninsula.

Tasks

1. Definition of the study domains and implementation in the models WRF-ARW and HERMESv2.0

1.1 Definition of domains:

In order to provide the proper setting for the photochemical simulation, two lower resolution domains will be defined, one of 12x12 km resolution covering Europe and another of 4x4 km resolution covering the Iberian Peninsula (see samples in Figure 1). These correspond to the domains currently used by the BSC forecasting system CALIOPE.

The third high resolution domain of 1x1 km will cover an area of 100 x 100 km centered in the location of the Aceca Energy Compound. For the vertical resolution, 37 layers will be defined for the meteorological model WRF-ARW, reaching up to 50 hPA and with the highest density within upper level of the planetary boundary layer (PBL). For the HERMESv2.0 model the resolution will cover the 11 first layers, for a top height of 1,000 m. A Geographic Information System (GIS) will be used to georeference all the activity data in order to estimate the emissions.

The initial and boundary conditions for the meteorological WRF-ARW model will come from the reanalysis of ERA-Interim, the latest reanalysis of the European Centre for Medium-Range Weather Forecasts (ECMWF), with a spatial resolution of 80 km and a temporal resolution of 6 hr. The data is generated 4 times a day for hours 00, 06, 12 and 18 UTC.

The meteorological parameters of temperature, solar radiation and precipitation simulated with WRF-ARW will be used as input for the model HERMESv2.0 for estimation of meteorological-dependent sources, such as traffic (due to fuel evaporation, etc.) and biogenic sources.

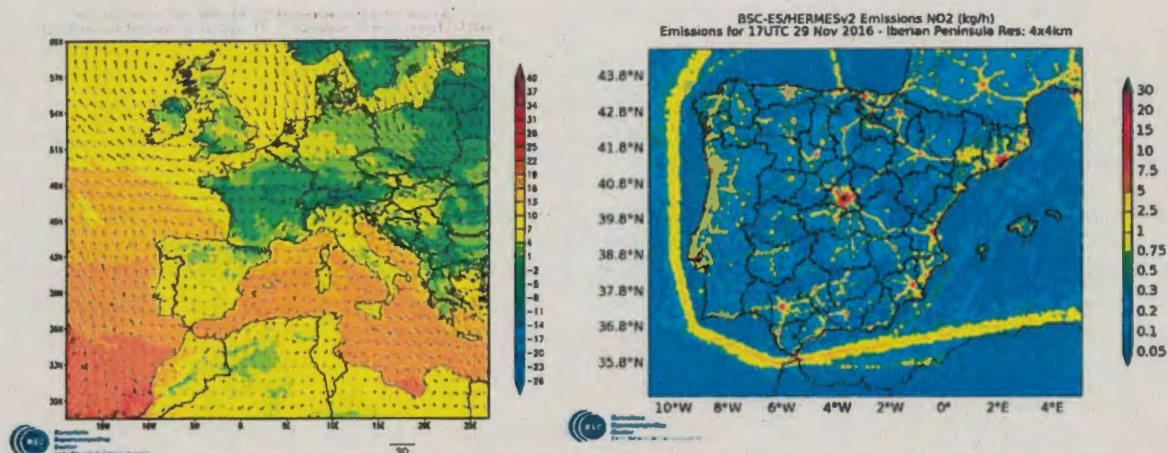


Figure 1: Sample domains for the meteorological simulations for Europe and the Iberian Peninsula for the CALIOPE system.

2. The emissions model will be applied for two scenarios in the study:

- **Base-Case:** Simulating real conditions and integrating all available emissions, including hourly measured emissions of NO_x, SO₂ and particulates from the two CCNG units of Aceca. These emissions will be provided by EPRI.
- **Sensitivity Simulation:** This will be a zero-out or brute force simulation that will use all available emissions but without including the emissions from the two CCNG units of the Aceca Energy

Compound. This Simulation will be used to determine the impact of the emissions from the compound in the area.

2.1 Simulations:

Simulations with the meteorological model WRF-ARW and the emissions model HERMESv2.0 will be run for the whole year selected for the study. All simulations will be run in the supercomputer MareNostrum 3. The supercomputer MareNostrum 3 is the most powerful supercomputer in Spain and one of the most powerful in Europe, according to the list TOP500. This supercomputer started operations at the beginning of 2005 and has since significantly upgraded, substituting and doubling the original number of processors (PowerPC) with 2.3 GHz processors. Currently the calculation capability of the supercomputer reaches 110 billion operations per second (1.1 PetaFLOPS). With 48,896 Intel Xeon 64 bit 2.6 GHz processors, it possesses a total storage capacity of 2 Petabytes (PiB) and a memory of 95.5 TiB. The operating system is GNU-Linux SLES.

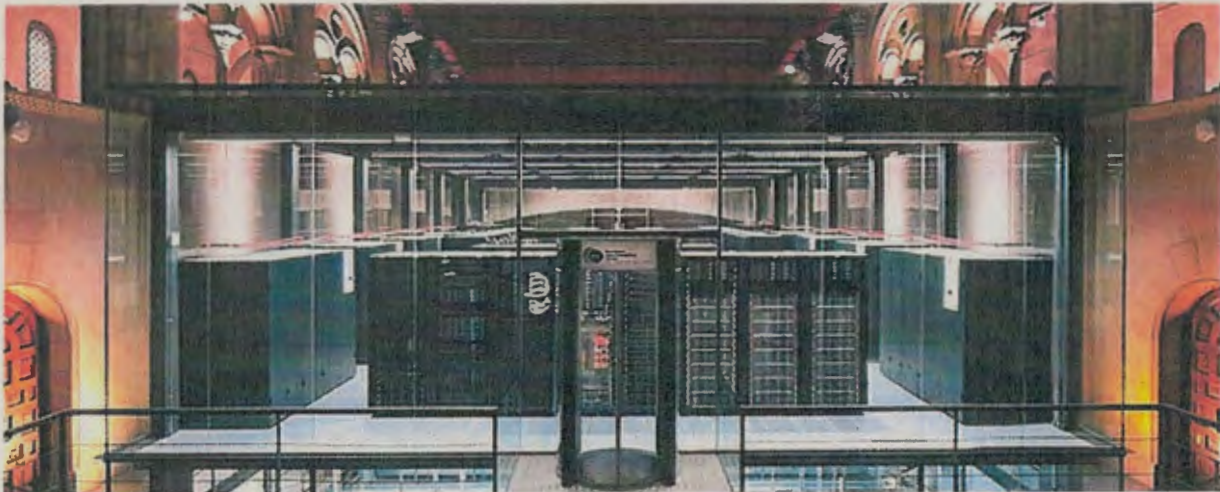


Figure 2 Supercomputer MareNostrum 3.

2.2 Post processing and transfer of results to EPRI.

The archives in format NetCDF generated by the models WRF-ARW and HERMESv2.0 will be QA'd to ensure that the results have been correctly generated. The emissions inventory for Spain will be checked against the corresponding emissions inventory of the Spanish Ministry of Agriculture and Fishing, Food and Environment (<http://www.manapa.gob.es/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/>). For the meteorological simulation, the results will be evaluated using as reference observed data from the closest meteorological monitoring stations to the area of study for temperature and wind speed.

To ensure proper data transfer for processing and use by EPRI, EPRI must provide a detailed list of variables of interest and formats.

2.3 Preparation of report:

Once the simulations are completed, a report will be written explaining the methodology used, specific configurations and configuration of the resulting archives.

Deliverables and Schedule

1. Deliverables and Schedule

At the beginning of the Work (month 1), a test simulation will be delivered for one of the days of the study to confirm that the format and configuration of the simulations have been properly designed, based on the needs of the user.

At the end of the Work (month 2), the results of the annual simulation for the meteorology and emissions for the selected study year will be delivered, along with the final report.

Task Description	Completion Date
Definition of study domains and implementation of WRF-ARW and HERMESv2.0 models	Month 1
Running Simulations	Months 1 - 2
Post processing and Transfer of Results (NetCDF archives)	Month 2
Preparation and delivery of Final Report	Month 2

2. EPRI Material / Other Documents:

- Emissions and meteorology data Excel spreadsheets

EPR RESEARCH INSTITUTE		Contract Cost Estimate (Footnote A) EPR 112 09/14 R		
Information called for by this form is required for contract award.				
NAME OF OFFEROR Barcelona Supercomputing Center-Centro Nacional de Supercomputación		PROPOSAL NO./EPR AGREEMENT NO./REF NO.		PAGE ____ of ____
HOME OFFICE ADDRESS Carrer Jordi Girona 31, Barcelona 08034 (Spain)		PROJECT TITLE Granulation of emissions and meteorology in high resolution for the study of CECAF of Azores		
UNITS(S) AND LOCATION(S) (where work is to be performed) Earth Science department NEXUS II building, Carrer Jordi Girona 28, 08034 Barcelona (Spain)		THIS FORM COVERS (Check one) <input type="checkbox"/> Task(s) No. <input checked="" type="checkbox"/> Total Cost Estimate		
Vendor Tax ID #. Please do not fill your SSN		PERIOD OF PERFORMANCE Start Date: _____ End Date: _____		
Phone Contact Number (0034) 93 413 77 16		Estimated Costs (US dollars)	Total Estimated Cost (US dollars)	Schedule Reference (Footnote B)
1. Direct Material (Instruction B.1)				
2. Subcontracted Effort (Instruction B.2)				
3. Interdivisional Effort (Instruction B.3)				
4. Equipment Rental/Lease (Instruction B.4)				
5. Special Equipment (Instruction B.5)				
6. Consultants (Instruction B.6)				
7. Outside Special Testing (Instruction B.7)				
8. Travel (Instruction B.8)				
9. Other Direct Costs (Instruction B.9)				
10. Direct Labor (Instruction B.10)		Est. Hours	Rate/Hour	€
a. Engineering		387	41,25 €	15 972
b. Programming		581	25,17 €	14 619
c. Technician				0
d. Manufacturing/Fabricator				0
e. Other (List)				0
1. Total Direct Labor		968		30 591
11. Total Direct Costs				30 591
12. Overhead (Instruction B.11)		%	X Base €	€
a. Fringe Benefits				0
b. Overhead		63,450%	30 591	19 410
c. Other				0
d. Total Overhead		EPR shall receive Government rates <input type="checkbox"/>		19 410
13. Total Direct Cost and Overhead				50 001
14. General and Administrative Expense Excluding IR&D Expense (Rate % of cost element number 13) (Instruction B.11)		Enter Rate %		0
15. IR&D Expense (Instruction B.12)				
16. Total Estimated Cost				50 001
17. Fixed Fee Rate % (Contractor Cost Sharing Rate %)				
18. Total (An itemization of the Total cost must be detailed above. A lump sum amount is not acceptable)				50 001

*For Time and Materials contracts leave lines 12-17 blank.

This proposal reflects our best estimates as of this date in accordance with the instructions for preparation of cost estimate and the footnotes which follow.

This proposal is valid for a period of 90 days from the signed date unless otherwise specified herein days.

Prof Francisco J. Doblas-Reyes
 Typed Name and Title

 Signature (Required) Date 18 January 2017

FOOTNOTES:

A. Submission of this form alone does not constitute an acceptable proposal. Costs listed above require supporting information accompanying this form. For further details of supporting information, refer to the "Instructions" tab below on the electronic form or [Click here for EPR.com "Contractor Resources" page](#)

B. For each item of cost, reference the schedule which contains the required supporting data

C. If you have not done business with EPR before or in the last five years, please send a message to receive the New Vendor Information Form from [EPR Vendor Administrator_vendoradmin@epri.com](mailto:EPR.Vendor.Administrator_vendoradmin@epri.com) and complete then submit the New Vendor Information form

For more information about EPR and doing business with EPR, visit www.epri.com

